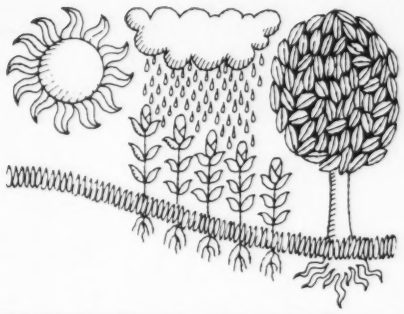


WEEKLY WEATHER AND CROP BULLETIN

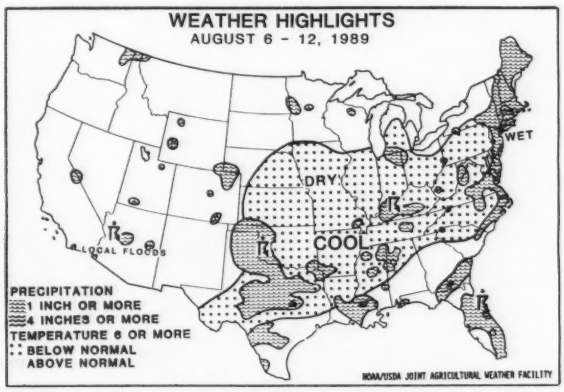
U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration, National Weather Service

U.S. DEPARTMENT OF AGRICULTURE
National Agricultural Statistics Service and World Agricultural Outlook Board

Volume 76, No. 32 | Washington, D.C. | Aug. 15, 1989

National Weather Summary

August 6-12, 1989



HIGHLIGHTS: A strong cold front raced southeastward across the eastern half of the Nation early in the week before becoming stationary off the eastern seaboard. Severe thunderstorms developed in the warm, humid air ahead of the front, while unusually cool air settled behind the front as numerous low-temperature records were reported daily. Scattered showers and thunderstorms persisted along the Atlantic coast and in the Rockies and Intermountain Plateau, where locally heavy rain caused flooding in the desert Southwest. Scattered rain moved across the Plains into the Great Lakes at week's end, while the western Corn Belt remained dry.

SUNDAY: Powerful thunderstorms developed in the warm unstable air ahead of a strong cold front stretching from New England, across the Ohio Valley, into the central Plains. Unseasonably cool air poured into the North Central States behind the front. Hurricane Dean roared over Bermuda.

MONDAY: The cold front crossed the Atlantic and Gulf Coast States, causing scattered showers and thunderstorms. Record heat preceded the front, while a large dome of high pressure anchored over the northern Plains spread very cool air into the East. Over 40 low-temperature records for the date were reported from the Plains to the Atlantic seaboard. Rain showers were widespread over the Intermountain Plateau as Hurricane Dean raced northward toward Newfoundland.

TUESDAY: The large high pressure system continued to dominate the eastern half of the Nation as more than 99 low-temperature records were set. Showers and thunderstorms developed around the front, which became stationary along the Gulf and southern Atlantic coasts. Rain was again widespread in the West. Hurricane Dean smashed into Newfoundland before veering into the North Atlantic.

JULY WORLD PRECIPITATION & TEMPERATURE MAPS

WEDNESDAY: Record-low temperatures again prevailed from the Plains to the eastern seaboard, with at least 75 records for the day tied or broken. Rain continued down the southern Atlantic coast around the stationary front. Thunderstorms remained active over the western third of the Nation and caused locally heavy rain and flooding in the deserts of the Southwest. Yuma, AZ received 3 1/2 inches (one and a half times their normal precipitation for the entire year).

THURSDAY: Cool air once again covered the eastern two-thirds of the country. Rain showers extended down the eastern seaboard, while scattered showers and thunderstorms spread from the Intermountain Plateau and Rockies into the Plains.

FRIDAY: Showers and thunderstorms with locally heavy rain remained along the Atlantic coast and over the Intermountain Plateau, Rockies, and Plains. It was another cool morning in the eastern half of the Nation, with more than 20 cities reporting record-low temperatures.

SATURDAY: Showers and thunderstorms continued along the stationary front that stretched along the Atlantic coast. Scattered showers extended from the Rockies and Plains into the Great Lakes.

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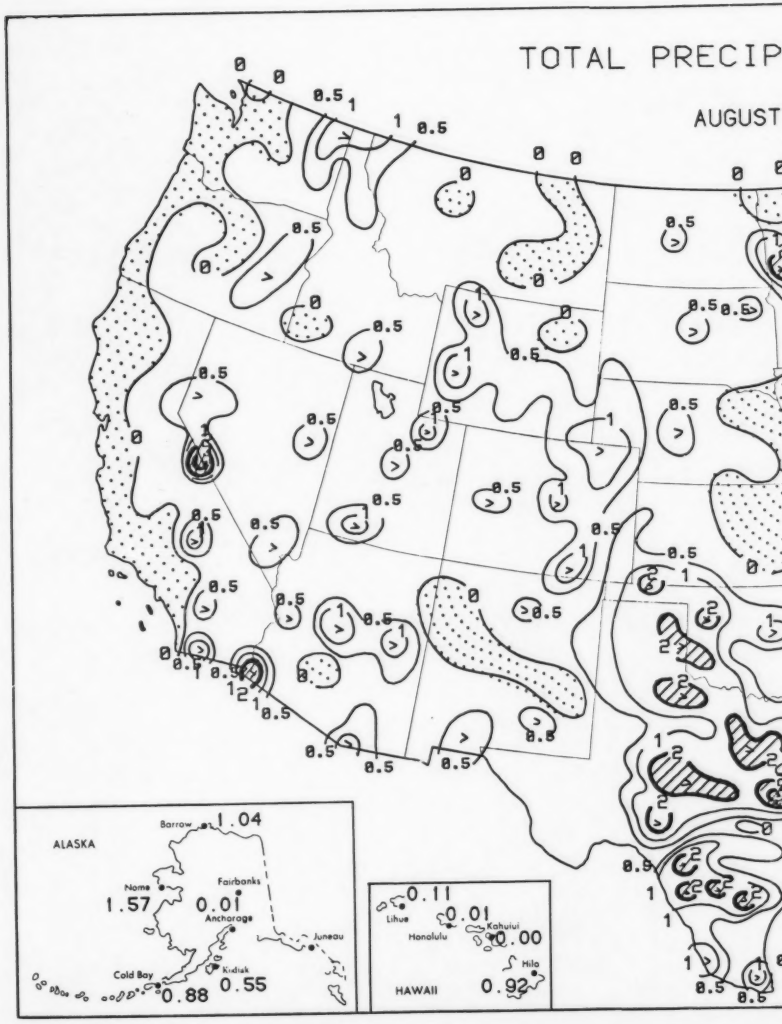
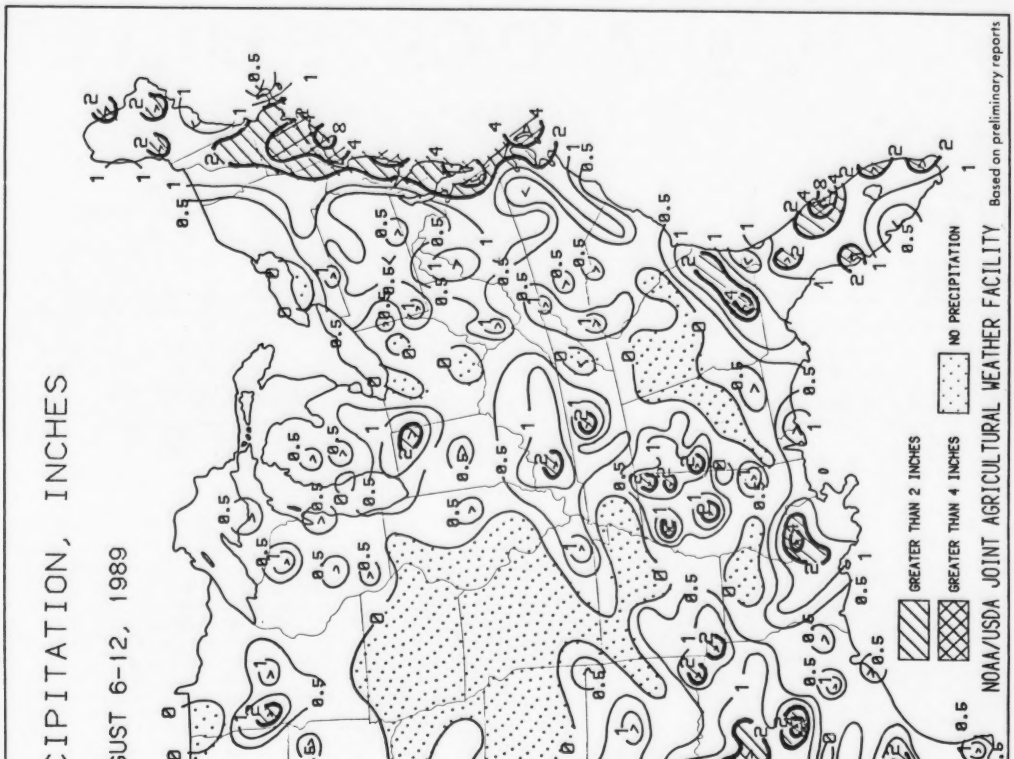
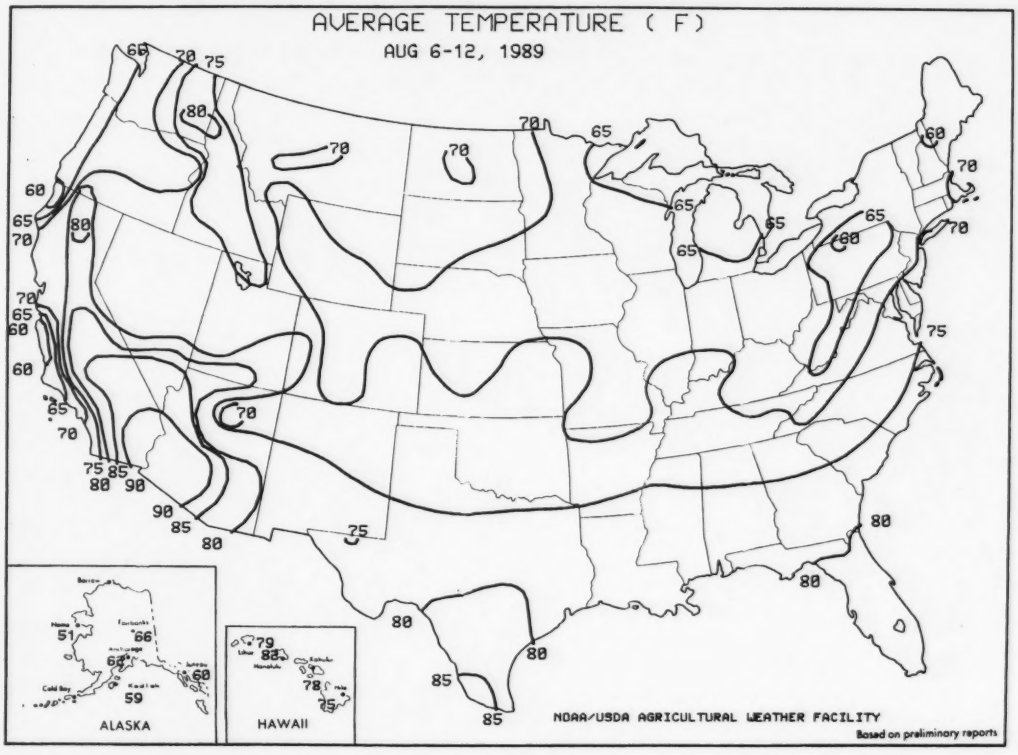
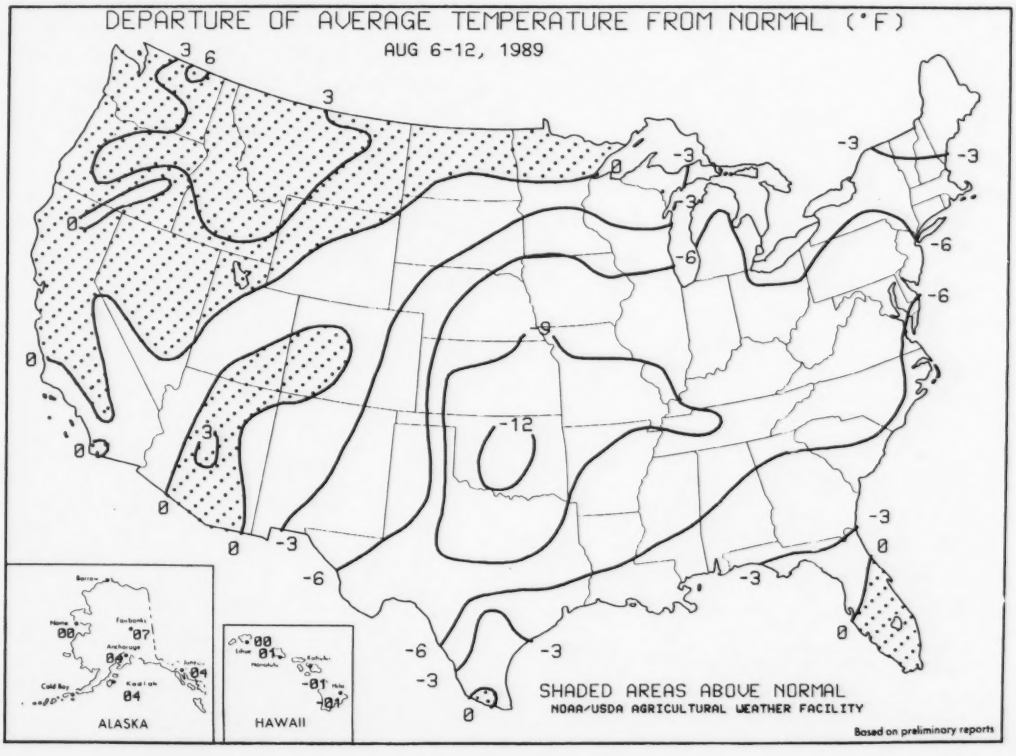
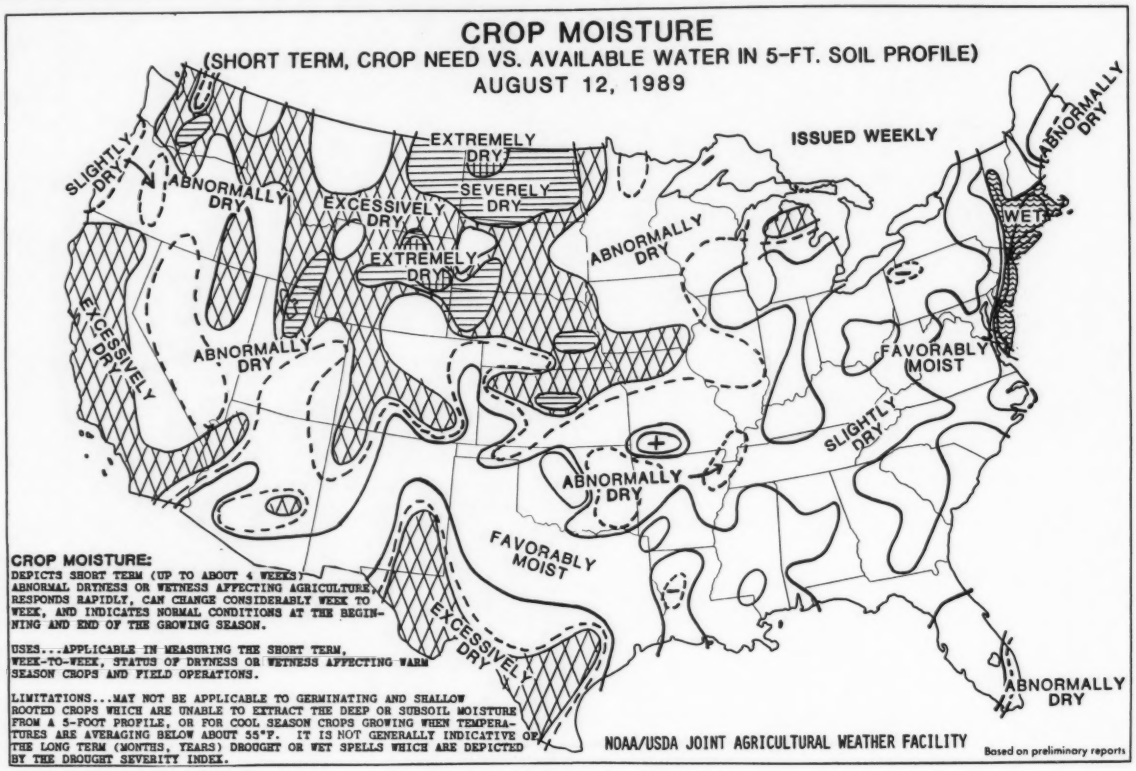
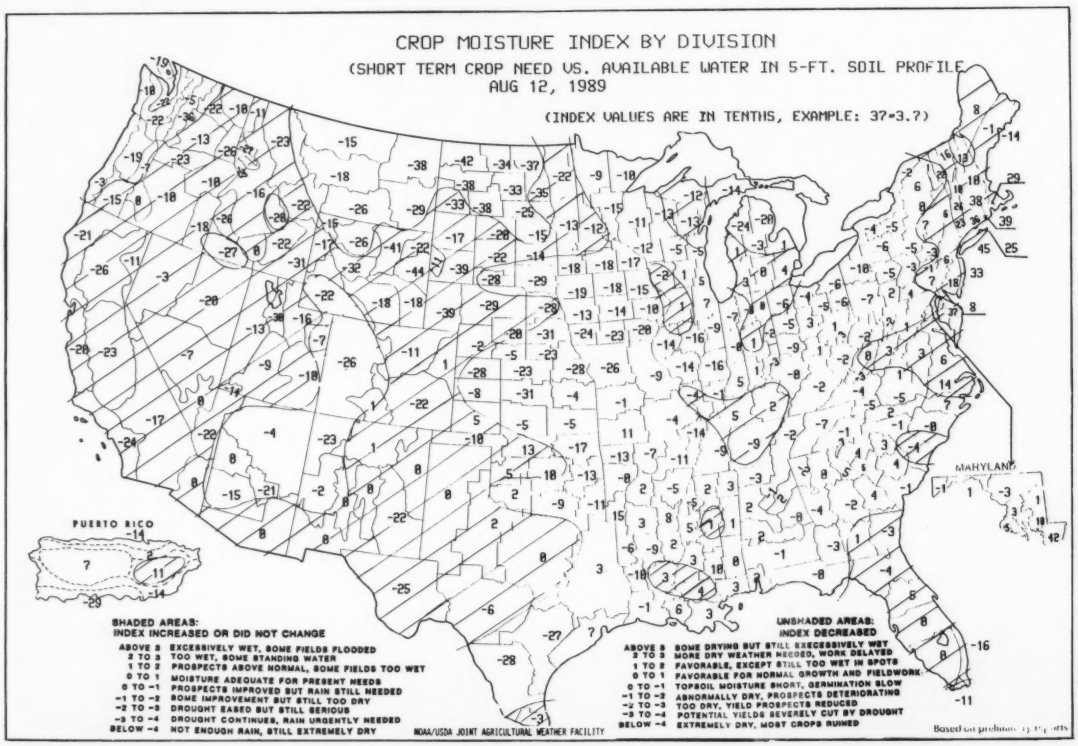

TOTAL PRECIP
AUGUST
ALASKA
Barrow
1.04
Nome
1.57
0.01
Fairbanks
Anchorage
Juneau
Kodiak
Cold Bay
0.88
0.55
0.11
Lihue
0.01
Honolulu
Kahului
0.00
Hilo
HAWAII
0.92

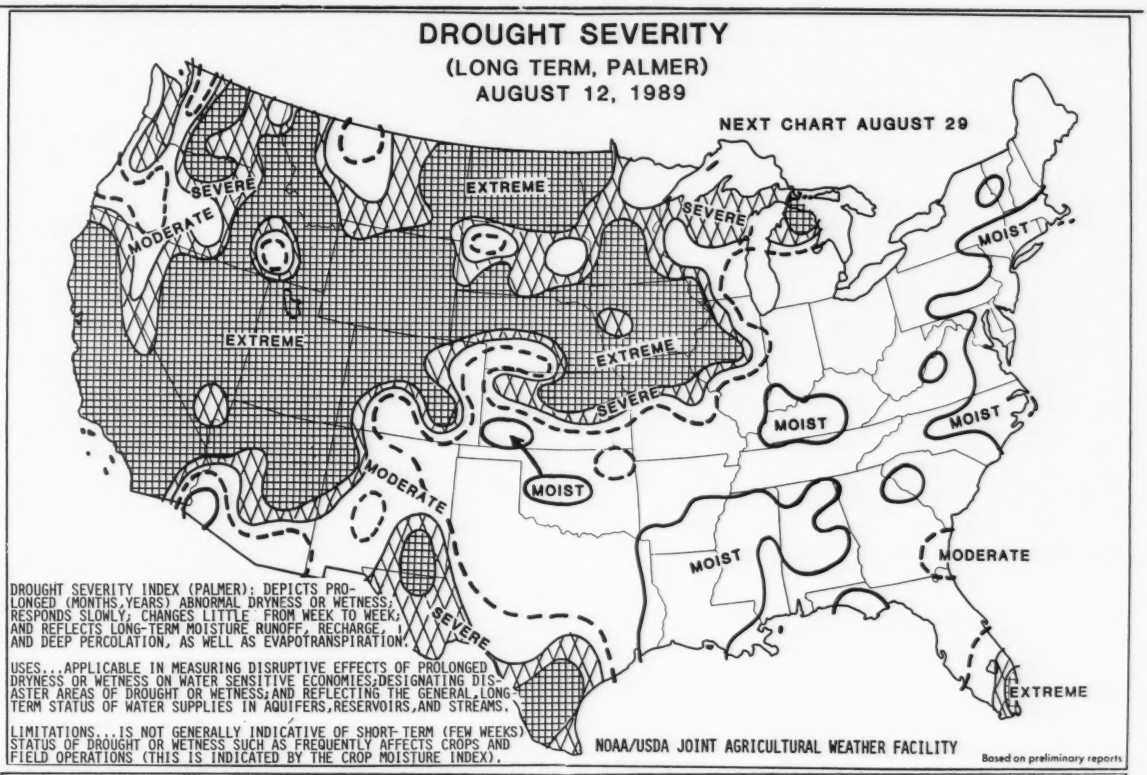

CIPITATION, INCHES
GUST 6-12, 1989
GREATER THAN 2 INCHES
GREATER THAN 4 INCHES
NO PRECIPITATION
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

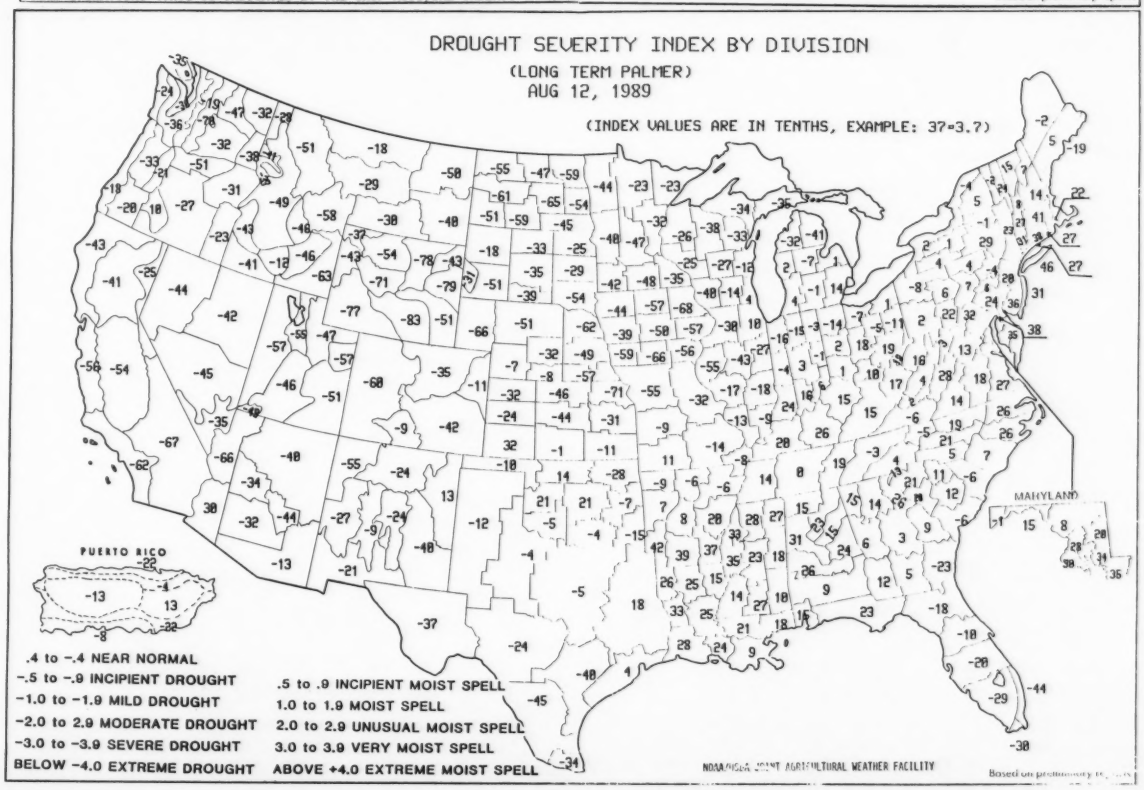

AVERAGE TEMPERATURE (F)
AUG 6-12, 1989
ALASKA
HAWAII
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

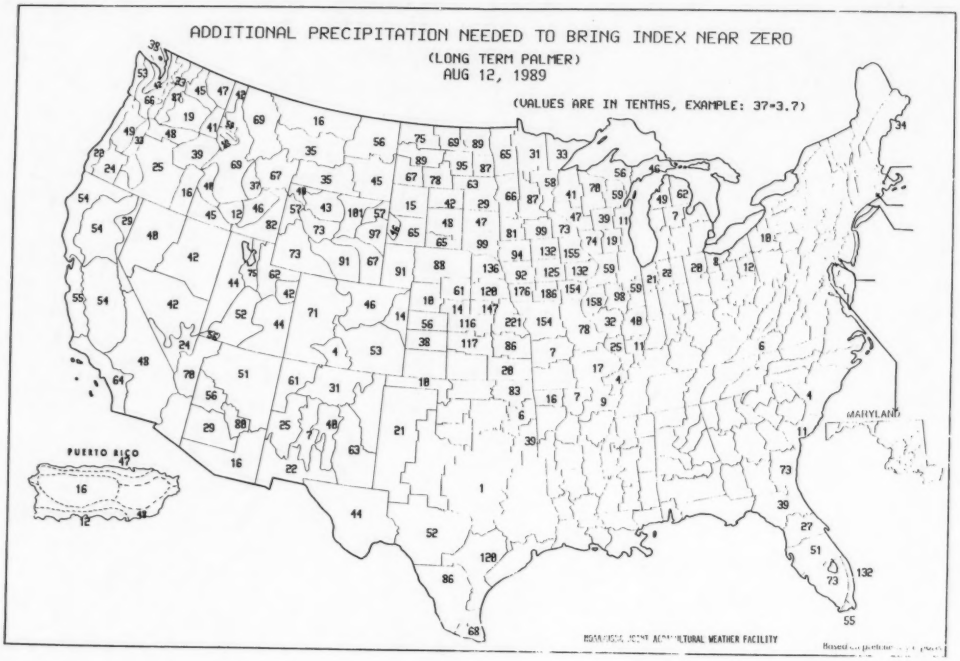

DEPARTURE OF AVERAGE TEMPERATURE FROM NORMAL (°F)
AUG 6-12, 1989
ALASKA
HAWAII
SHADED AREAS ABOVE NORMAL
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

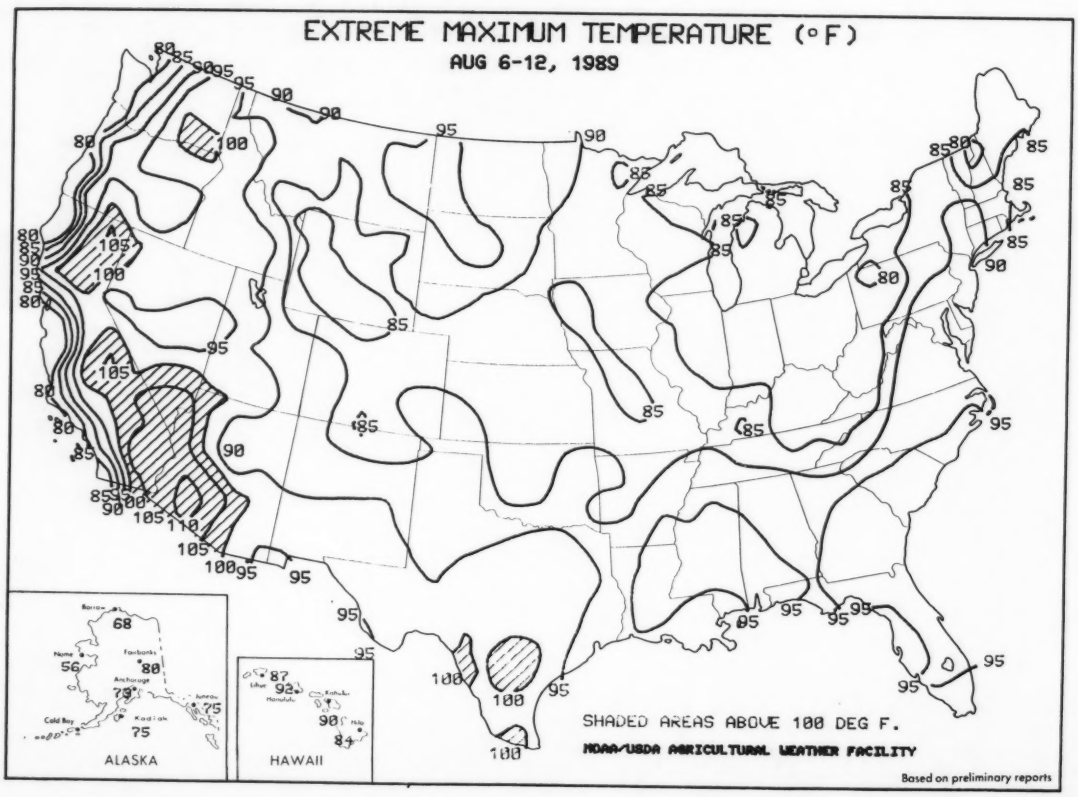

CROP MOISTURE
(SHORT TERM, CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE)
AUGUST 12, 1989
ISSUED WEEKLY
SLIGHTLY DRY
ABNORMALLY DRY
EXCESSIVELY DRY
EXTREMELY DRY
SEVERELY DRY
ABNORMALLY DRY
WET
ABNORMALLY DRY
EXCESSIVELY DRY
ABNORMALLY DRY
FAVORABLY MOIST
SLIGHTLY DRY
ABNORMALLY DRY
FAVORABLY MOIST
EXCESSIVELY DRY
ABNORMALLY DRY
CROP MOISTURE:
DEPICTS SHORT TERM (UP TO ABOUT 4 WEEKS) ABNORMAL DRYNESS OR WETNESS AFFECTING AGRICULTURE. RESPONDS RAPIDLY, CAN CHANGE CONSIDERABLY WEEK TO WEEK, AND INDICATES NORMAL CONDITIONS AT THE BEGINNING AND END OF THE GROWING SEASON.
USES...APPLICABLE IN MEASURING THE SHORT TERM, WEEK-TO-WEEK, STATUS OF DRYNESS OR WETNESS AFFECTING WARM SEASON CROPS AND FIELD OPERATIONS.
LIMITATIONS...MAY NOT BE APPLICABLE TO GERMINATING AND SHALLOW ROOTED CROPS WHICH ARE UNABLE TO EXTRACT THE DEEP OR SUBSOIL MOISTURE FROM A 5-FOOT PROFILE, OR FOR COOL SEASON CROPS GROWING WHEN TEMPERATURES ARE AVERAGING BELOW ABOUT 55°F. IT IS NOT GENERALLY INDICATIVE OF THE LONG TERM (MONTHS, YEARS) DROUGHT OR WET SPELLS WHICH ARE DEPICTED BY THE DROUGHT SEVERITY INDEX.
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


CROP MOISTURE INDEX BY DIVISION
(SHORT TERM CROP NEED VS. AVAILABLE WATER IN 5-FT. SOIL PROFILE
AUG 12, 1989
(INDEX VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)
PUERTO RICO
MARYLAND
SHADED AREAS:
INDEX INCREASED OR DID NOT CHANGE
ABOVE 3 EXCESSIVELY WET, SOME FIELDS FLOODED
2 TO 3 TOO WET, SOME STANDING WATER
1 TO 2 PROSPECTS ABOVE NORMAL, SOME FIELDS TOO WET
0 TO 1 MOISTURE ADEQUATE FOR PRESENT NEEDS
0 TO -1 PROSPECTS IMPROVED BUT RAIN STILL NEEDED
-1 TO -2 SOME IMPROVEMENT BUT STILL TOO DRY
-2 TO -3 DROUGHT EASED BUT STILL SERIOUS
-3 TO -4 DROUGHT CONTINUES, RAIN URGENTLY NEEDED
BELOW -4 NOT ENOUGH RAIN, STILL EXTREMELY DRY
UNSHADED AREAS:
INDEX DECREASED
ABOVE 3 SOME DRYING BUT STILL EXCESSIVELY WET
2 TO 3 MORE DRY WEATHER NEEDED, WORK DELAYED
1 TO 2 FAVORABLE, EXCEPT STILL TOO WET IN SPOTS
0 TO 1 FAVORABLE FOR NORMAL GROWTH AND FIELDWORK
0 TO -1 TOPSOIL MOISTURE SHORT, GERMINATION SLOW
-1 TO -2 ABNORMALLY DRY, PROSPECTS DETERIORATING
-2 TO -3 TOO DRY, YIELD PROSPECTS REDUCED
-3 TO -4 POTENTIAL YIELDS SEVERELY CUT BY DROUGHT
BELOW -4 EXTREMELY DRY, MOST CROPS RUINED
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DROUGHT SEVERITY
(LONG TERM, PALMER)
AUGUST 12, 1989
NEXT CHART AUGUST 29
EXTREME
SEVERE
MODERATE
MOIST
DROUGHT SEVERITY INDEX (PALMER): DEPICTS PRO-LONGED (MONTHS,YEARS) ABNORMAL DRYNESS OR WETNESS; RESPONDS SLOWLY; CHANGES LITTLE FROM WEEK TO WEEK, AND REFLECTS LONG-TERM MOISTURE RUNOFF, RECHARGE, AND DEEP PERCOLATION, AS WELL AS EVAPOTRANSPIRATION.
USES...APPLICABLE IN MEASURING DISRUPTIVE EFFECTS OF PROLONGED DRYNESS OR WETNESS ON WATER SENSITIVE ECONOMIES;DESIGNATING DISASTER AREAS OF DROUGHT OR WETNESS;AND REFLECTING THE GENERAL,LONG-TERM STATUS OF WATER SUPPLIES IN AQUIFERS,RESERVOIRS,AND STREAMS.
LIMITATIONS...IS NOT GENERALLY INDICATIVE OF SHORT-TERM (FEW WEEKS) STATUS OF DROUGHT OR WETNESS SUCH AS FREQUENTLY AFFECTS CROPS AND FIELD OPERATIONS (THIS IS INDICATED BY THE CROP MOISTURE INDEX).
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
Based on preliminary reports


DROUGHT SEVERITY INDEX BY DIVISION
(LONG TERM PALMER)
AUG 12, 1989
(INDEX VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)
PUERTO RICO
MARYLAND
.4 to -.4 NEAR NORMAL
-.5 to -.9 INCIPIENT DROUGHT
-1.0 to -1.9 MILD DROUGHT
-2.0 to 2.9 MODERATE DROUGHT
-3.0 to -3.9 SEVERE DROUGHT
BELOW -4.0 EXTREME DROUGHT
.5 to .9 INCIPIENT MOIST SPELL
1.0 to 1.9 MOIST SPELL
2.0 to 2.9 UNUSUAL MOIST SPELL
3.0 to 3.9 VERY MOIST SPELL
ABOVE +4.0 EXTREME MOIST SPELL
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY


ADDITIONAL PRECIPITATION NEEDED TO BRING INDEX NEAR ZERO
(LONG TERM PALMER)
AUG 12, 1989
(VALUES ARE IN TENTHS, EXAMPLE: 37=3.7)
PUERTO RICO
MARYLAND
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY


EXTREME MAXIMUM TEMPERATURE (°F)
AUG 6-12, 1989
ALASKA
HAWAII
SHADED AREAS ABOVE 100 DEG F.
NOAA/USDA AGRICULTURAL WEATHER FACILITY
Based on preliminary reports

National Weather Data for Selected Cities

Weather Data for the Week Ending August 12, 1989

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
AL BIRMINGHAM	86	63	95	57	75	-6	.2	-.7	.2	21.6	204	44.5	122	89	41	1	0	1	0
MOBILE	89	68	97	60	78	-4	.8	-.7	.7	17.8	115	36.9	88	94	46	2	0	3	1
MONTGOMERY	88	67	94	63	77	-5	T	-.7	T	23.3	248	46.6	144	96	48	2	0	0	0
AK ANCHORAGE	68	56	73	53	62	4	1.0	.6	.5	6.2	163	9.8	135	92	60	0	0	3	0
BARROW	62	47	68	41	54	16	1.1	.9	.7	4.8	304	5.7	234	100	76	0	0	4	1
FAIRBANKS	76	55	80	49	66	7	T	-.4	T	3.9	102	6.6	109	89	43	0	0	1	0
JUNEAU	69	51	75	46	60	4	.5	-.6	.3	6.5	73	18.9	73	95	58	0	0	3	0
KODIAK	65	53	75	51	59	4	.6	-.5	.5	12.3	131	25.8	78	98	76	0	0	3	0
NOME	54	48	56	45	51	0	2.0	1.3	.8	7.2	159	14.2	190	99	89	0	0	7	1
AZ PHOENIX	105	85	108	82	95	4	T	-.2	T	.1	9	2.4	65	52	24	7	0	0	0
PRESCOTT	88	61	97	59	75	3	1.1	.2	.6	4.3	84	7.1	64	75	28	2	0	4	1
TUCSON	100	72	102	69	86	1	.4	-.2	.2	2.1	57	4.0	65	80	25	7	0	3	0
YUMA	101	78	106	71	90	-4	3.4	3.4	3.4	6.0		6.8	579	83	40	6	0	1	1
AR FORT SMITH	87	60	96	55	73	-9	0	-.7	0	12.6	159	39.4	157	94	39	1	0	0	0
LITTLE ROCK	84	64	92	57	74	-8	T	-.7	T	11.1	133	38.5	122	78	49	1	0	0	0
CA BAKERSFIELD	99	71	100	66	85	1	T	0	T	T	0	2.3	59	53	24	7	0	0	0
EUREKA	63	54	67	53	59	2	0	-.1	0	.3	39	19.2	86	90	76	0	0	0	0
FRESNO	99	70	103	66	84	5	T	0	T	T	43	4.9	70	58	21	7	0	1	0
LOS ANGELES	73	64	76	63	69	-2	0	0	0	T	0	3.2	39	94	70	0	0	0	0
REDDING	98	62	102	53	80	-2	0	-.1	0	1.0	83	19.6	79	65	17	7	0	0	0
SACRAMENTO	94	58	99	53	76	1	.2	.2	.1	.6	477	9.1	86	85	24	6	0	2	0
SAN DIEGO	77	68	79	67	73	2	T	0	T	T	80	2.0	31	88	67	0	0	0	0
SAN FRANCISCO	70	55	72	54	63	0	T	0	T	T	8	7.4	59	92	56	0	0	0	0
CO DENVER	83	59	90	53	71	-2	.5	.1	.2	4.3	103	11.4	107	91	35	1	0	6	0
GRAND JUNCTION	91	65	95	62	78	1	.3	.1	.3	1.0	80	4.4	98	57	21	4	0	1	0
PUEBLO	86	57	92	53	72	-4	.3	-.2	.2	2.2	58	5.0	68	95	33	3	0	3	0
CT BRIDGEPORT	75	61	89	55	68	-6	2.9	2.1	2.3	12.0	155	32.5	130	79	60	0	0	3	2
HARTFORD	77	57	94	48	67	-6	4.9	4.0	3.0	14.9	189	36.0	138	94	55	1	0	4	2
DC WASHINGTON	80	64	94	57	72	-7	T	-1.0	T	11.7	131	32.5	135	86	55	1	0	2	0
FL APALACHICOLA	86	73	94	70	79	-2	.8	-.8	.5	16.7	114	31.0	97	93	64	2	0	6	1
DAYTONA BEACH	93	72	100	70	82	1	1.5	.2	.6	6.0	42	20.4	72	95	48	4	0	5	2
JACKSONVILLE	89	72	97	65	80	-2	.3	-1.5	.1	14.3	94	24.2	75	95	59	3	0	4	0
KEY WEST	92	80	94	75	86	1	.1	-.9	.1	8.6	84	14.7	74	82	57	7	0	2	0
MIAMI	92	76	95	74	84	1	1.8	.3	.9	16.6	94	22.0	66	89	52	6	0	5	2
ORLANDO	93	72	96	69	83	0	3.5	2.0	2.0	15.0	85	25.0	77	97	46	7	0	4	2
TALLAHASSEE	87	70	99	66	79	-3	1.4	-.3	1.4	25.6	141	42.0	98	96	57	2	0	1	1
TAMPA	91	74	93	70	82	0	2.2	.4	1.3	18.4	118	23.1	79	92	56	6	0	3	2
WEST PALM BEACH	92	74	97	71	83	0	2.9	1.7	1.7	11.4	71	22.7	69	95	57	7	0	5	2
GA ATLANTA	84	65	94	62	75	-4	0	-.8	0	17.2	180	39.5	119	87	46	1	0	0	0
AUGUSTA	85	66	96	62	75	-5	T	-.9	T	17.4	177	34.6	116	96	55	2	0	0	0
MACON	86	66	96	62	76	-5	T	-.9	T	11.5	119	32.8	106	94	47	2	0	0	0
SAVANNAH	83	69	98	63	76	-5	1.6	0	1.4	14.5	92	23.6	70	93	63	2	0	2	1
HI HILO	82	67	84	65	75	-1	.9	-1.5	.3	30.7	163	129.0	166	94	63	0	0	5	0
HONOLULU	90	74	92	71	82	1	T	-.1	T	2.5	201	15.2	110	81	48	4	0	1	0
KAHULUI	89	68	90	66	78	-1	0	-.1	0	2.1	292	28.2	236	88	52	3	0	0	0
LIHUE	84	74	87	72	79	0	.1	-.3	0	8.7	200	39.1	156	87	62	0	0	3	0
ID BOISE	94	65	99	57	79	5	T	0	T	.2	12	6.6	90	50	19	6	0	1	0
LEWISTON	94	66	102	62	80	6	.2	.1	.2	1.9	87	8.7	107	56	18	6	0	1	0
POCATELLO	90	56	97	48	73	3	.1	-.1	.1	.8	50	6.8	99	73	22	4	0	2	0
IL CHICAGO	79	57	83	52	68	-5	.8	0	.3	12.9	145	19.1	89	92	48	0	0	5	0
MOLINE	82	53	86	48	67	-7	0	-.9	0	7.1	67	18.4	75	93	43	0	0	0	0
PEORIA	80	54	83	48	67	-7	T	-.8	T	4.1	44	14.0	62	93	41	0	0	1	0
QUINCY	83	55	87	51	69	-7	0	-.9	0	3.0	30	9.8	41	86	33	0	0	0	0
ROCKFORD	78	55	84	49	67	-6	0	-.9	0	11.7	111	19.5	83	97	50	0	0	0	0
SPRINGFIELD	81	55	85	49	68	-7	0	-.8	0	4.1	48	17.6	79	93	43	0	0	0	0
IN EVANSVILLE	82	57	86	52	70	-7	1.2	.5	1.2	13.0	149	37.7	136	97	44	0	0	1	1
FORT WAYNE	79	54	84	47	67	-6	2.2	1.4	1.1	11.3	136	24.0	107	97	47	0	0	3	2
INDIANAPOLIS	78	54	83	48	66	-8	.8	-.1	.6	12.3	127	29.2	114	99	51	0	0	3	1
SOUTH BEND	77	55	83	46	66	-6	1.8	.9	1.7	12.0	131	22.5	98	91	50	0	0	2	1
IA DES MOINES	81	56	86	48	69	-7	T	-.9	T	6.1	69	14.4	71	85	36	0	0	0	0
SIOUX CITY	80	55	83	47	68	-7	0	-.7	0	7.7	90	12.3	70	83	37	0	0	0	0
WATERLOO	83	51	88	46	67	-5	0	-.9	0	4.3	41	10.6	48	94	31	0	0	0	0
KS CONCORDIA	83	59	87	50	71	-8	0	-.8	0	7.6	85	13.7	74	76	33	0	0	0	0
DODGE CITY	80	59	89	50	69	-10	.2	-.4	.2	10.2	144	15.4	106	87	44	0	0	1	0
GOODLAND	81	57	86	51	69	-6	.3	-.1	.2	9.8	166	14.1	120	98	49	0	0	3	0
TOPEKA	83	52	86	49	68	-11	0	-.8	0	10.0	94	19.9	91	99	38	0	0	0	0
WICHITA	81	60	88	51	71	-11	T	-.6	T	13.0	149	21.7	117	86	39	0	0	0	0
KY BOWLING GREEN	82	57	86	52	70	-8	1.1	.3	1.1	16.6	162	47.1	144	95	45	0	0	1	1
LEXINGTON	79	55	84	49	67	-9	.7	-.2	.7	9.7	89	37.8	123	92	44	0	0	1	1
LOUISVILLE	81	58	85	53	70	-8	.5	-.2	.5	12.9	143	40.4	142	90	39	0	0	1	1
LA ALEXANDRIA	87	65	95	58	76	-7	.7	-.3	.7	16.7	165	48.9	140	89	44	3	0	1	1
BATON ROUGE	89	68	95	60	78	-3	1.5	.3	1.4	31.6	256	58.8	159	96	49	3	0	2	1
LAKE CHARLES	90	68	95	61	79	-3	.1	-1.1	.1	31.4	274	51.4	161	92	45	4	0	3	0
NEW ORLEANS	88	70	95	63	79	-3	.7	-.7	.7	19.0	138	35.5	93	96	52	2	0	2	1

Based on 1951-80 normals

Weather Data for the Week Ending August 12, 1989

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
SHREVEPORT	86	64	96	58	75	-8	.1	-.4	.1	22.2	277	49.4	172	98	47	2	0	1	0
ME CARIBOU	76	57	82	46	66	2	1.8	.9	.9	7.4	85	18.5	88	96	57	0	0	4	2
PORTLAND	77	57	86	47	67	-1	.7	.1	.5	7.8	113	25.2	99	97	60	0	0	4	0
MD BALTIMORE	77	61	91	53	69	-7	.3	-.8	.1	13.6	145	36.1	140	92	58	1	0	2	0
SALISBURY	77	65	91	58	71	-5	3.8	2.5	1.5	15.4	151	32.7	119	95	66	1	0	4	3
MA BOSTON	78	63	88	59	70	-3	2.4	1.6	1.3	10.6	153	23.9	92	93	56	0	0	5	1
CHATHAM	74	61	77	58	68	-1	.1	-.8	.1	9.6	134	29.4	107	99	84	0	0	4	0
MI ALPENA	75	48	85	40	62	-4	.1	-.6	.1	3.4	46	12.2	69	99	46	0	0	2	0
DETROIT	77	56	82	47	67	-5	T	-.7	T	8.5	109	19.1	97	92	50	0	0	1	0
FLINT	77	52	85	44	64	-5	.5	-.3	.5	9.6	132	19.0	105	94	45	0	0	1	0
GRAND RAPIDS	77	52	85	43	64	-7	T	-.7	T	7.9	102	18.4	91	96	47	0	0	1	0
HOUGHTON LAKE	73	47	84	38	60	-6	.2	-.5	.1	4.6	65	13.5	79	96	52	0	0	3	0
LANSING	78	49	86	42	64	-6	T	-.6	T	6.4	84	18.3	101	98	46	0	0	1	0
MARQUETTE	75	50	83	41	62	-2	.9	.2	.4	7.7	93	17.7	78	94	42	0	0	4	0
MUSKEGON	75	53	82	43	64	-6	0	-.7	0	5.8	96	15.7	86	94	52	0	0	0	0
SAULT ST. MARIE	74	49	87	43	62	-2	.2	-.6	.1	4.5	60	15.0	81	99	51	0	0	3	0
MN ALEXANDRIA	83	56	88	50	70	0	.8	0	.8	3.7	43	9.5	58	84	32	0	0	1	1
DULUTH	79	51	86	39	65	1	.5	-.5	.5	5.6	59	14.9	80	95	37	0	0	2	0
INT'L FALLS	80	51	87	43	66	1	.1	-.6	.1	10.6	123	15.6	102	96	42	0	0	1	0
MINNEAPOLIS	81	58	87	49	69	-3	.1	-.8	.1	7.1	79	16.9	96	84	35	0	0	1	0
ROCHESTER	79	53	85	46	66	-3	T	-.8	T	6.4	71	14.1	78	89	39	0	0	1	0
MS GREENWOOD	87	64	95	57	75	-6	.5	-.1	.5	23.5	259	50.3	142	95	46	1	0	1	1
JACKSON	87	63	95	55	75	-7	T	-.8	T	13.2	144	34.7	100	99	48	2	0	1	0
MERIDIAN	88	63	96	56	76	-6	T	-.8	T	20.0	195	47.1	131	98	45	1	0	0	0
MO CAPE GIRARDEAU	82	58	88	53	70	--	.9	.1	.9	15.5	180	39.5	137	97	43	0	0	1	1
COLUMBIA	81	57	84	52	69	-9	0	-.7	0	10.6	133	23.2	99	89	41	0	0	0	0
KANSAS CITY	84	57	86	50	70	-9	0	-.8	0	8.3	81	18.0	78	88	36	0	0	0	0
SAINT LOUIS	83	63	87	57	73	-5	0	-.6	0	6.9	83	21.7	96	77	36	0	0	0	0
SPRINGFIELD	81	57	87	52	69	-9	T	-.6	T	7.5	81	23.1	93	87	38	0	0	0	0
MT BILLINGS	88	60	92	55	74	2	T	-.2	T	1.8	55	10.0	99	68	25	3	0	0	0
GLASGOW	89	58	97	52	73	2	T	-.3	T	2.2	46	7.5	94	53	18	3	0	0	0
GREAT FALLS	88	55	92	51	72	3	T	-.3	T	5.2	120	13.5	124	75	22	2	0	0	0
HAVRE	88	55	93	52	72	2	.2	-.1	.2	2.8	71	7.5	90	62	21	3	0	1	0
HELENA	88	57	91	53	73	5	.2	-.1	.1	3.4	97	8.7	108	78	23	2	0	3	0
KALISPELL	88	52	95	43	70	5	.4	.1	.3	3.1	85	11.2	112	88	23	3	0	3	0
MILES CITY	88	62	96	55	75	1	T	-.3	T	4.3	90	12.0	117	65	23	4	0	0	0
MISSOULA	90	54	95	47	72	5	.2	.1	.1	3.3	109	8.9	104	80	22	5	0	3	0
NE GRAND ISLAND	81	55	87	46	68	-8	.2	-.4	.2	7.2	98	10.9	66	85	39	0	0	1	0
LINCOLN	85	53	89	44	69	-8	T	-.8	T	6.8	81	10.1	54	87	34	0	0	1	0
NORFOLK	81	54	87	46	68	-7	T	-.6	T	5.9	68	11.2	65	83	36	0	0	0	0
NORTH PLATTE	81	54	86	46	67	-7	.6	.2	.6	6.2	82	11.0	75	93	42	0	0	3	1
OMAHA	81	59	87	50	70	-7	0	-.9	0	7.6	81	12.2	61	73	37	0	0	0	0
SCOTTSBLUFF	84	59	93	54	72	-2	.8	.6	.7	2.3	43	6.7	59	89	38	1	0	3	1
VALENTINE	84	54	90	40	69	-5	.3	-.2	.3	5.9	92	9.1	72	75	33	1	0	1	0
NV ELY	85	51	91	42	68	1	.8	.6	.5	2.4	145	5.3	89	78	26	2	0	5	0
LAS VEGAS	99	77	109	72	88	-2	.9	.7	.8	.9	125	2.2	89	56	26	6	0	2	1
RENO	84	56	92	53	70	2	.8	.8	.5	2.4	351	5.2	110	86	27	1	0	2	1
WINNEMUCCA	89	56	100	49	72	2	.4	.3	.3	.7	56	3.1	62	73	22	3	0	2	0
NH CONCORD	76	54	89	43	65	-4	2.1	1.4	1.1	10.4	146	23.9	112	98	57	0	0	4	2
NJ ATLANTIC CITY	78	62	91	52	70	-5	4.6	3.5	2.7	14.9	172	34.6	135	97	63	1	0	4	3
NM ALBUQUERQUE	88	65	92	63	76	-1	.2	-.2	.1	1.9	78	3.3	73	65	23	2	0	3	0
CLOVIS	85	60	94	55	73	-5	.6	0	.2	8.4	129	9.7	89	90	40	2	0	4	0
ROSWELL	89	65	96	60	77	-2	T	-.4	T	1.3	37	2.8	49	77	30	3	0	1	0
NY ALBANY	76	55	91	46	66	-5	1.1	.3	.9	13.9	186	27.2	128	94	54	1	0	3	1
BINGHAMTON	71	52	83	45	62	-7	1.7	.9	1.5	11.9	143	26.5	119	96	58	0	0	3	1
BUFFALO	77	56	83	49	66	-4	T	-.9	T	9.0	124	25.5	119	88	42	0	0	0	0
NEW YORK	79	64	93	59	72	-5	5.7	4.7	3.2	18.2	215	39.1	151	81	52	1	0	3	2
ROCHESTER	77	57	85	50	67	-4	T	-.7	T	8.3	127	22.4	119	91	46	0	0	0	0
SYRACUSE	75	55	87	50	65	-5	.1	-.7	.1	9.7	111	21.4	91	93	56	0	0	3	0
NC ASHEVILLE	78	56	84	48	67	-7	1.0	0	.9	19.9	216	37.8	135	98	48	0	0	3	1
CHARLOTTE	83	66	94	60	74	-5	.3	-.5	.3	9.9	111	29.1	103	88	49	1	0	2	0
GREENSBORO	79	61	93	55	70	-8	T	-.9	T	10.1	103	30.8	114	91	58	1	0	1	0
HATTERAS	83	73	93	69	78	-1	5.4	4.1	1.7	16.7	140	49.0	153	97	68	2	0	6	4
NEW BERN	82	68	96	63	75	-5	2.7	1.2	1.5	18.2	127	39.7	119	97	66	2	0	5	2
RALEIGH	77	65	93	60	71	-7	1.0	0	.7	14.2	145	36.1	134	96	64	2	0	3	1
WILMINGTON	82	68	97	63	75	-5	.1	-1.4	.1	19.2	122	41.3	121	95	66	2	0	3	0
ND BISMARCK	86	52	93	42	69	-2	T	-.4	T	2.5	44	7.4	67	85	25	3	0	1	0
FARGO	87	55	92	43	71	0	1.6	1.0	1.5	3.8	50	10.9	82	82	27	3	0	2	1
GRAND FORKS	87	53	92	42	70	2	.1	-.5	.1	2.0	29	7.1	58	77	24	4	0	1	0
WILLISTON	90	53	98	43	72	1	.2	-.1	.2	2.6	52	7.6	79	72	20	4	0	1	0
OH AKRON-CANTON	77	55	83	49	66	-6	0	-.8	0	11.5	134	28.1	120	90	47	0	0	0	0
CINCINNATI	79	56	83	48	68	-8	.3	-.4	.3	9.9	103	34.0	127	91	40	0	0	1	0
CLEVELAND	78	57	84	53	67	-4	T	-.7	T	8.5	105	28.7	129	87	44	0	0	1	0
COLUMBUS	78	54	83	46	66	-8	.1	-.8	.1	14.6	154	31.8	129	96	43	0	0	2	0

Weather Data for the Week Ending August 12, 1989

STATES AND STATIONS	TEMPERATURE °F						PRECIPITATION							RELATIVE HUMIDITY, PERCENT		NUMBER OF DAYS			
																TEMPERATURE °F		PRECIPITATION	
	AVERAGE MAXIMUM	AVERAGE MINIMUM	EXTREME HIGH	EXTREME LOW	AVERAGE	DEPARTURE FROM NORMAL	WEEKLY TOTAL, IN.	DEPARTURE FROM NORMAL	GREATEST IN 24-HOUR, IN.	TOTAL, IN., SINCE Jun 1	PCT. NORMAL SINCE Jun 1	TOTAL, IN., SINCE JAN 1	PCT. NORMAL SINCE JAN 1	AVERAGE MAXIMUM	AVERAGE MINIMUM	90 AND ABOVE	32 AND BELOW	.01 INCH OR MORE	.50 INCH OR MORE
DAYTON	79	56	84	49	67	-7	.1	-.7	.1	8.7	104	35.2	152	90	41	0	0	1	0
TOLEDO	79	53	83	44	66	-5	.5	-.2	.4	14.3	181	27.3	135	94	47	0	0	2	0
YOUNGSTOWN	77	52	85	41	64	-6	.1	-.8	0	13.8	154	29.1	122	95	47	0	0	2	0
OK OKLAHOMA CITY	79	62	88	54	70	-12	.2	-.3	.2	18.6	240	29.0	142	86	46	0	0	2	0
TULSA	84	62	91	57	73	-10	.1	-.6	.1	9.6	105	22.2	90	87	38	1	0	1	0
OR ASTORIA	69	52	71	48	61	0	0	-.3	0	4.8	116	35.0	94	92	63	0	0	0	0
BURNS	86	48	92	43	67	-2	.2	.1	.2	1.4	145	7.1	120	76	20	2	0	1	0
MEDFORD	91	61	99	55	76	4	.1	.1	.1	.3	29	10.6	100	83	27	4	0	1	0
PENDLETON	90	60	99	53	75	2	.1	0	.1	.8	68	8.9	125	58	18	4	0	2	0
PORTLAND	79	56	87	52	68	0	T	-.2	T	1.2	55	19.1	94	88	44	0	0	0	0
SALEM	83	52	91	45	67	1	0	-.1	0	1.9	107	16.9	77	92	33	2	0	0	0
PA ALLENTOWN	75	56	89	49	66	-7	.4	-.6	.3	10.5	114	29.1	108	93	59	0	0	3	0
ERIE	75	57	80	51	66	-4	.7	-.2	.5	7.9	90	25.7	113	88	50	0	0	3	1
HARRISBURG	77	58	91	51	67	-8	.2	-.5	.1	14.1	172	32.7	135	93	54	1	0	3	0
PHILADELPHIA	79	62	94	55	71	-6	2.9	1.9	2.4	17.1	183	36.2	141	89	58	1	0	4	1
PITTSBURGH	77	54	86	47	66	-6	.1	-.7	.1	11.9	139	30.9	128	91	47	0	0	1	0
SCRANTON	73	53	87	46	63	-8	.1	-.7	.1	10.5	129	24.5	116	97	58	0	0	2	0
RI PROVIDENCE	80	60	89	54	70	-2	3.3	2.4	2.3	14.7	201	33.9	127	96	57	0	0	4	2
SC CHARLESTON	82	70	98	65	76	-5	.3	-1.2	.3	9.9	60	22.9	66	89	63	2	0	1	0
COLUMBIA	84	67	97	63	75	-6	T	-1.3	T	16.0	133	34.7	105	90	55	2	0	1	0
FLORENCE	81	67	97	63	74	-7	.8	-.4	.4	13.5	110	30.1	102	92	60	2	0	3	0
GREENVILLE	83	62	93	57	73	-6	T	-.9	T	11.4	110	29.1	87	89	45	1	0	1	0
SD ABERDEEN	86	55	91	47	70	-2	.1	-.3	.1	4.3	67	11.2	86	84	29	3	0	2	0
HURON	85	55	92	44	70	-3	.2	-.3	.1	5.2	82	11.0	82	87	31	2	0	3	0
RAPID CITY	87	54	96	45	71	-2	T	-.3	T	1.9	31	6.1	48	72	27	4	0	1	0
SIOUX FALLS	82	55	87	47	69	-5	.5	-.2	.4	4.3	58	9.1	57	84	33	0	0	2	0
TN CHATTANOOGA	85	62	93	56	73	-5	.1	-.7	.1	19.6	213	46.5	137	92	49	1	0	1	0
KNOXVILLE	82	59	87	53	71	-7	T	-.7	T	12.1	127	35.9	115	94	44	0	0	0	0
MEMPHIS	85	64	94	58	74	-7	0	-.9	0	14.7	163	43.4	127	85	45	1	0	0	0
NASHVILLE	82	59	87	53	71	-9	.5	-.3	.4	11.7	134	38.2	120	90	41	0	0	2	0
TX ABILENE	85	64	97	56	75	-9	1.6	1.1	1.0	12.3	223	21.4	151	83	38	1	0	2	2
AMARILLO	83	60	92	56	72	-6	1.3	.6	.9	10.1	138	14.6	112	91	43	1	0	2	1
AUSTIN	92	70	99	65	81	-5	T	-.4	T	3.8	67	19.9	107	88	38	5	0	0	0
BEAUMONT	90	68	95	60	79	-5	.1	-1.2	.1	27.9	215	53.7	161	93	44	4	0	1	0
BROWNSVILLE	93	74	95	73	84	-1	.3	-.2	.3	4.8	97	12.1	102	96	52	7	0	1	0
CORPUS CHRISTI	92	74	98	69	83	-1	0	-.7	0	4.4	60	11.2	68	89	48	5	0	0	0
DEL RIO	89	72	97	67	80	-6	.2	-.1	.2	.8	19	5.8	59	73	40	4	0	1	0
EL PASO	91	64	97	59	78	-4	.4	.1	.3	1.8	67	3.9	94	76	29	4	0	2	0
FORT WORTH	85	65	99	60	75	-11	.8	.4	.5	12.7	243	34.1	175	87	45	1	0	2	0
GALVESTON	86	74	91	70	80	-4	.4	-.5	.3	22.6	257	34.8	157	86	56	2	0	2	0
HOUSTON	88	68	95	62	78	-6	.5	-.4	.5	25.1	267	49.8	182	93	48	1	0	1	0
LUBBOCK	86	63	93	57	75	-4	.7	.2	.5	6.4	108	9.1	80	84	38	2	0	2	1
MIDLAND	88	63	94	54	75	-6	.2	-.1	.2	1.3	36	4.2	52	83	34	4	0	2	0
SAN ANGELO	87	63	100	54	75	-9	2.7	2.3	1.5	5.9	162	13.6	135	91	40	2	0	2	2
SAN ANTONIO	94	70	100	64	82	-3	.4	-.2	.4	5.1	87	12.4	74	87	32	6	0	1	0
VICTORIA	91	70	99	63	81	-4	.2	-.4	.2	7.0	86	14.9	72	92	41	5	0	1	0
WACO	88	66	99	59	77	-10	.6	.2	.6	8.3	166	26.3	137	93	47	1	0	1	1
WICHITA FALLS	83	64	93	58	73	-12	1.7	1.3	1.2	16.3	296	27.3	165	92	46	1	0	3	1
UT CEDAR CITY	87	58	98	55	73	-1	.4	.1	.3	2.5	124	5.2	83	74	27	3	0	2	0
SALT LAKE CITY	92	64	98	61	78	2	.3	.1	.2	.9	45	7.0	70	68	23	5	0	3	0
VT BURLINGTON	77	56	88	50	67	-2	.4	-.5	.3	10.8	127	19.6	98	92	50	0	0	3	0
VA NORFOLK	80	71	90	67	75	-3	4.0	2.8	2.6	14.0	130	38.2	136	87	64	2	0	4	2
RICHMOND	77	63	92	57	70	-8	1.6	.4	1.6	12.9	120	33.4	124	92	61	1	0	2	1
ROANOKE	79	57	90	50	68	-8	T	-.9	T	17.9	216	33.2	135	92	51	1	0	1	0
WA QUILLAYUTE	71	47	75	44	59	0	T	-.6	T	7.1	110	48.1	84	96	51	0	0	0	0
SEATTLE-TACOMA	79	56	85	51	67	3	T	-.3	T	1.8	71	19.4	96	78	38	0	0	0	0
SPOKANE	87	59	97	53	73	4	.3	.1	.2	.7	36	8.3	84	72	29	2	0	2	0
YAKIMA	89	55	97	44	72	2	T	-.1	T	.1	16	3.5	78	79	22	2	0	1	0
WV BECKLEY	74	53	80	44	63	-6	.1	-.7	.1	8.5	85	26.9	97	95	53	0	0	1	0
CHARLESTON	78	55	86	47	67	-8	.2	-.8	.2	11.8	113	37.5	133	99	50	0	0	1	0
HUNTINGTON	80	55	84	48	68	-8	T	-.9	T	13.3	135	39.1	143	97	48	0	0	1	0
PARKERSBURG	77	54	85	48	66	-9	T	-.8	T	12.3	130	35.6	141	100	53	0	0	1	0
WI GREEN BAY	80	53	87	46	67	-2	.5	-.2	.5	4.6	60	12.9	74	88	37	0	0	1	1
LACROSSE	82	57	89	53	69	-3	T	-.8	T	4.9	53	12.9	66	96	38	0	0	1	0
MADISON	78	53	84	46	66	-5	.4	-.5	.3	7.5	83	14.8	75	95	44	0	0	2	0
MILWAUKEE	76	57	83	50	67	-4	.6	-.1	.3	10.7	129	19.5	98	94	52	0	0	3	0
WAUSAU	78	55	85	47	67	-2	.4	-.6	.4	6.3	67	14.6	74	93	38	0	0	1	0
WY CASPER	85	53	90	49	69	-1	.6	.5	.6	2.9	114	8.3	103	82	25	1	0	3	1
CHEYENNE	77	55	84	48	66	-2	1.5	1.2	.6	5.8	130	9.7	98	95	47	0	0	7	1
LANDER	82	56	83	52	69	-1	.7	.6	.4	3.7	161	11.2	120	74	28	0	0	3	0
SHERIDAN	86	54	89	49	70	0	.1	-.2	.1	2.2	63	8.6	82	84	25	0	0	1	0
PR SAN JUAN	-999	79	-999	75	-999	—													

National Agricultural Summary

August 7-13, 1989

HIGHLIGHTS: Lack of rain lowered crop conditions in the central and northern Great Plains and western Corn Belt. Below-normal temperatures slowed crop development in the Delta and southern Great Plains. Soil moisture was mostly adequate to short in the East and short to adequate in the Great Plains and the West.

Winter wheat harvest was 93 percent (%) complete, 2 percentage points behind the 5-year average. Spring wheat was mostly fair with harvest 60% complete, 16 points ahead of normal. Corn was mostly good to fair with 96% of the acreage in the silking stage or beyond, 1 point behind the 97% average. Forty-eight percent of the acreage was in the dough stage and 13% in the dent stage, both 11 points behind normal. Soybeans were mostly good to fair with 86% of the acreage bloomed, 4 points behind normal. Sixty-four percent of the acreage was setting pods, 5 points behind normal. Cotton was mostly fair to good with 83% of the acreage setting bolls, 7 points behind normal. Eight percent of the acreage was in the boll opening stage, slightly behind the 9% average. Sorghum was mostly good to fair with 57% of the acreage headed, 12 points behind normal. Twenty-five percent of the acreage was turning color, equal to the average. Rain benefited citrus groves in Florida. Cooler weather eased livestock stress in the Great Plains.

SMALL GRAIN: Winter wheat harvest was 93% complete, 2 points behind normal. Harvest continued to lag behind normal in the Pacific Northwest but was virtually complete in the other major producing States. Harvest lagged 14 and 22 points behind normal in Idaho and Montana, respectively.

Spring wheat was mostly fair with harvest 60% complete, 16 points ahead of normal. Harvest lagged behind normal in Idaho and Montana. Harvest advanced 30 or more points in Minnesota, North Dakota, and South Dakota. Harvest was nearly complete in South Dakota.

CORN: Corn was mostly good to fair. Ninety-six percent of the acreage was in the silking stage or beyond, 1 point behind the 97% average. Forty-eight percent was in the dough stage, 11 points behind normal. Thirteen percent of the acreage was in the dent stage, 11 points behind normal. Crop condition deteriorated in the central and northern Great Plains and western Corn Belt due to lack of rain. Corn in Illinois, Iowa, and Nebraska was mostly good to fair. Crop development was behind normal in most of the 17 major producing States. The percentage of acreage in the dent stage was 10 or more points behind normal in 7 of the 17 major producing States. Harvest continued in Georgia and Texas.

SOYBEANS: Soybeans were mostly good to fair with blooming 86% complete, 4 points behind normal. Sixty-four percent of the acreage was setting pods, 5 points behind normal. Crop condition declined in the central and northern Great Plains due to lack of rain. In Ohio, some fields suffered from nitrogen deficiency caused by heavy runoff from rains earlier in the season. Crop condition improved slightly in the Delta and the Southeast. Crop development was behind normal in most of the 19 major producing States. The percentage of acres setting pods was 49 points behind normal in Ohio and 10 or more points behind normal in Indiana, Kansas, Louisiana, Michigan, and Tennessee.

COTTON: Cotton was mostly fair to good with 83% of the acreage setting bolls, 7 points behind normal. Eight percent of the acreage was in the boll opening stage, slightly behind the 9% average. The percentage of acres opening bolls lagged behind normal in most of the Delta but was near or ahead of normal in the other major producing States. Below-normal temperatures slowed crop development in the Delta and portions of the southern Great Plains. Cotton was good in California, fair to good in Texas, and mostly fair in Mississippi. Rain improved crop condition in Texas, but development was slowed by cooler temperatures in the High Plains. Harvest continued in Texas.

SORGHUM: Sorghum was mostly good to fair with 57% of the acreage headed, 12 points behind normal. Twenty-five percent of the acreage was turning color, equal to the average. Cinch bug infestations were heavy in the drier areas of Nebraska and Kansas. Dry weather lowered crop condition in Kansas, Nebraska, and South Dakota. Crop condition improved in the Delta. The percentage of acreage heading was more than 10 points behind normal in Kansas, Mississippi, and Nebraska. In Texas, sorghum was mostly good to fair and harvest was 43% complete, 6 points behind normal. Harvest began in Louisiana.

OTHER FIELD CROPS: Rice was mostly good to fair with 64% of the acreage headed, 4 points behind normal. Heading lagged behind normal except in Texas. Rice harvest continued in Louisiana and Texas but lagged behind normal. Cool weather slowed crop development in Arkansas, where rice was mostly good to fair. Tobacco was good to fair in North Carolina. Harvest was 34% complete, 4 points ahead of normal. Tobacco was good in South Carolina and good to excellent in Georgia. In Kentucky, burley tobacco was mostly fair with harvest 10% complete. Peanuts were good to fair in North Carolina and good in Alabama and Georgia. Harvest was expected to begin soon in Texas.

FRUIT AND NUTS: Rain benefited Florida citrus groves. Groves were in very good condition. In Georgia, apples were mostly fair to good with harvest 18% complete, 11 points behind normal. Pecans were mostly good to fair. Peach harvest continued in North Carolina and South Carolina. Early variety apple and peach harvests were underway in New York. Hot, dry weather slowed citrus crop development in the Rio Grande Valley of Texas. Pecans continued to mature with heavier-than-normal drop. Apple harvest was underway in eastern Arizona. In California, wine grape harvest gained momentum in the San Joaquin Valley and table grape harvest continued. Peach, plum, and nectarine harvests were over 80% complete. Almond and prune harvests were underway. Apple and pear crops were developing well in Oregon. In Washington, peach and pear harvests were active.

VEGETABLES: Fall vegetable plantings continued in Florida. Crops being planted included tomatoes, peppers, celery, and eggplant. Watermelon harvest was nearly complete in Georgia. In South Carolina, watermelons were mostly good with harvest 87% complete. In Arkansas, some watermelons were not harvested because of excess moisture during July. Onion harvest was nearly complete in the Trans-Pecos area of Texas. Fall vegetable planting continued in the Rio Grande Valley. Melon harvest continued in the Salt River Valley of Arizona. In California, lettuce growers began planting their fall crop in the Huron District. Fall potato planting continued in the Perris-Hemet area. Processing tomato harvest continued in the Sacramento Valley and Kingsburg-Dinuba area. In Oregon, sweet corn harvest was underway in the Willamette Valley. Potato harvest began in southwestern Idaho.

PASTURES AND LIVESTOCK: Pastures remained in mostly good to excellent condition in the Delta and East. Pastures were mostly fair to poor in the Great Plains and the West. Cooler temperatures eased livestock stress in the Great Plains.

Crop Production Highlights

ALL WHEAT production is forecast as of August 1, at 2.04 billion bushels, up 3 percent from 1988, but 3 percent below July 1. Average yield at 32.6 bushels per acre is 0.8 bushel less than July 1 and 1.5 bushels below last year.

CORN FOR GRAIN production is forecast at 7.35 billion bushels, 49 percent above last year's drought reduced crop. The yield per acre is 112.8 bushels, up 28.2 bushels from last year but 6.6 bushels below the record high of 119.4 bushels in 1987.

SOYBEAN production is forecast at 1.91 billion bushels, 24 percent above 1988. Yield is forecast at 32.3 bushels per acre, the fourth highest of record.

ALL COTTON production for the 1989 season is forecast at 11.8 million bales, down 23 percent from last year and 20 percent below 1987.

PEANUT production for 1989 is forecast at 4.53 billion pounds, up 14 percent from last year and 25 percent above 1987. Each of the three growing areas expect higher production this year.

ALL HAY production for 1989 is forecast at 145 million tons, an increase of 14 percent from last year's drought reduced output. Higher yields are only partially offset by lower acreage.

ALL TOBACCO production for 1989 is forecast at 1.48 billion pounds, 8 percent above 1988. The higher production is resulting from increased acreage which more than offset lower average yields.

NUMBER OF FARMS in the U.S. in 1989 is estimated at 2.17 million, down down 1 percent from 1988. Land in farms is estimated at 991 million acres, a decrease of less than 1 percent from 1988. Average size of farms increased from 453 acres in 1988 to 456 acres in 1989.

Crop Progress

FOR WEEK ENDING AUGUST 13, 1989

CORN % SILKING

	1989	1988	AVG.
COLO	86	96	94
GA	100	100	100
ILL	99	100	100
IND	97	100	100
IOWA	100	100	100
KANS	98	99	98
KY	99	98	98
MICH	95	100	96
MINN	95	99	96
MO	100	100	100
NEBR	100	100	99
N C	100	100	100
OHIO	83	92	96
PA	62	77	87
S DAK	91	95	86
TEX	100	100	100
WIS	88	88	90
17 STATES	96	98	97

THESE 17 STATES PRODUCED 94% OF THE 1988 CORN CROP.

CORN % DOUGH

	1989	1988	AVG.
COLO	18	47	50
GA	99	99	100
ILL	78	83	80
IND	53	67	68
IOWA	36	64	53
KANS	65	75	60
KY	60	58	67
MICH	5	15	30
MINN	23	66	39
MO	82	85	82
NEBR	60	69	59
N C	90	89	88
OHIO	26	46	61
PA	9	14	33
S DAK	35	66	31
TEX	91	92	92
WIS	23	44	38
17 STATES	48	65	59

THESE 17 STATES PRODUCED 94% OF THE 1988 CORN CROP.

CORN % DENT

	1989	1988	AVG.
COLO	0	4	9
GA	90	92	96
ILL	18	36	38
IND	10	10	17
IOWA	10	34	23
KANS	25	35	20
KY	23	23	35
MICH	0	2	4
MINN	0	27	13
MO	42	53	56
NEBR	7	20	14
N C	53	70	69
OHIO	3	8	24
PA	0	1	5
S DAK	6	22	7
TEX	72	68	72
WIS	0	10	6
17 STATES	13	27	24

THESE 17 STATES PRODUCED 94% OF THE 1988 CORN CROP.

SPRING WHEAT % HARVESTED

	1989	1988	AVG.
IDAHO	19	55	25
MINN	69	87	50
MONT	19	68	29
N DAK	63	87	39
S DAK	97	100	76
5 STATES	60	85	44

THESE 5 STATES PRODUCED 87% OF THE 1988 SPRING WHEAT CROP.

COTTON % SETTING BOLLS

	1989	1988	AVG.
ALA	93	99	99
ARIZ	100	99	99
ARK	95	100	99
CALIF	98	98	97
GA	97	100	98
LA	93	96	98
MISS	89	97	98
MO	100	100	100
N MEX	95	95	95
N C	85	85	91
OKLA	55	85	60
S C	87	80	91
TENN	100	100	100
TEX	73	91	84
14 STATES	83	94	90

THESE 14 STATES PRODUCED 99% OF THE 1988 COTTON CROP.

SOYBEANS % BLOOM

	1989	1988	AVG.
ALA	62	70	73
ARK	52	50	62
GA	84	86	86
ILL	98	100	99
IND	96	98	97
IOWA	100	100	100
KANS	80	90	85
KY	70	77	75
LA	80	68	82
MICH	85	90	95
MINN	99	99	98
MISS	57	57	73
MO	86	90	87
NEBR	100	100	100
N C	48	54	59
OHIO	84	96	99
S C	52	65	62
S DAK	95	98	90
TENN	60	65	75
19 STATES	86	89	90

THESE 19 STATES PRODUCED 95% OF THE 1988 SOYBEANS CROP.

WINTER WHEAT % HARVESTED

	1989	1988	AVG.
ARK	100	100	100
CALIF	99	99	99
COLO	100	100	100
GA	100	100	100
IDAHO	33	62	47
ILL	100	100	100
IND	100	100	100
KANS	100	100	100
MICH	100	100	99
MO	100	100	100
MONT	46	95	68
NEBR	100	100	100
N MEX	100	100	NA
N C	100	100	100
OHIO	100	100	100
OKLA	100	100	100
OREG	68	79	77
S DAK	100	100	97
TEX	100	100	100
WASH	63	63	65
20 STATES	93	97	NA
EXCL. STATES WITH NA	93	97	95

THESE 20 STATES PRODUCED 90% OF THE 1988 WINTER WHEAT CROP.

NA - NOT AVAILABLE.

COTTON % BOLLS OPENING

	1989	1988	AVG.
ALA	10	12	6
ARIZ	35	40	30
ARK	0	0	7
CALIF	2	8	6
GA	6	5	10
LA	0	7	12
MISS	0	3	6
MO	1	1	4
N MEX	2	0	0
N C	5	10	0
OKLA	0	0	0
S C	6	0	2
TENN	4	4	3
TEX	12	13	11
14 STATES	8	10	9

THESE 14 STATES PRODUCED 99% OF THE 1988 COTTON CROP.

SOYBEANS % SETTING PODS

	1989	1988	AVG.
ALA	35	38	38
ARK	28	25	34
GA	49	44	54
ILL	92	100	87
IND	51	69	68
IOWA	96	98	89
KANS	45	70	55
KY	32	35	35
LA	49	41	59
MICH	40	50	55
MINN	91	98	84
MISS	32	27	38
MO	64	68	66
NEBR	75	88	79
N C	23	24	26
OHIO	36	84	85
S C	21	21	26
S DAK	75	83	66
TENN	28	39	42
19 STATES	64	73	69

THESE 19 STATES PRODUCED 95% OF THE 1988 SOYBEANS CROP.

GRAIN SORGHUM
% HEADED

	1989	1988	AVG.
ARK	89	85	NA
ILL	80	85	NA
KANS	30	55	50
LA	93	87	96
MISS	85	95	96
MO	86	83	85
NEBR	70	88	82
OKLA	65	50	65
S DAK	59	78	61
TENN	90	82	89
TEX	77	80	83
11 STATES	58	71	NA
EXCL. STATES WITH NA	57	71	69

THESE 11 STATES PRODUCED 96%
OF THE 1988 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

GRAIN SORGHUM
% COLORING

	1989	1988	AVG.
ARK	38	36	NA
ILL	16	28	NA
KANS	4	4	5
LA	59	40	71
MISS	48	37	61
MO	37	24	39
NEBR	10	11	7
OKLA	20	25	25
S DAK	17	21	8
TENN	32	39	51
TEX	64	62	64
11 STATES	25	24	NA
EXCL. STATES WITH NA	25	24	25

THESE 11 STATES PRODUCED 96%
OF THE 1988 GRAIN SORGHUM CROP.

NA - NOT AVAILABLE.

RICE
% HEADED

	1989	1988	AVG.
ARK	54	46	62
CALIF	30	30	31
LA	84	78	87
MISS	69	62	79
TEX	100	100	96
5 STATES	64	59	68

THESE 5 STATES PRODUCED 97%
OF THE 1988 RICE CROP.

Crop Condition
PERCENT

FOR WEEK ENDING AUGUST 13, 1989

SPRING WHEAT

STATE	VP	P	F	G	EX
IDAHO	1	4	16	68	11
MINN	2	9	53	30	6
MONT	5	11	26	44	14
N DAK	13	14	64	9	0
S DAK	5	10	51	33	1
5 STATE	8	12	52	24	4
PREV WEEK	7	16	55	20	2
PREV YEAR	34	39	21	5	1

RICE

STATE	VP	P	F	G	EX
ARK	0	0	21	74	5
CALIF	0	0	10	75	15
LA	0	4	54	38	4
MISS	0	0	40	55	5
TEX	0	0	38	54	8
5 STATE	0	1	30	62	7
PREV WEEK	0	1	37	55	7
PREV YEAR	0	0	33	62	5

SORGHUM

STATE	VP	P	F	G	EX
ARK	0	2	24	55	19
ILL	0	6	24	64	6
KANS	5	23	15	43	14
LA	0	14	36	50	0
MISS	0	5	40	55	0
MO	1	5	29	62	3
NEBR	28	22	33	17	0
OKLA	0	0	5	95	0
S DAK	4	30	41	24	1
TENN	0	2	20	71	7
TEX	1	6	20	56	17
11 STATE	7	16	22	45	10
PREV WEEK	1	9	26	49	15
PREV YEAR	1	14	37	41	7

SOYBEANS

STATE	VP	P	F	G	EX
ALA	0	14	32	52	2
ARK	2	6	69	23	0
GA	2	0	15	70	13
ILL	0	1	25	65	9
IND	0	1	12	76	11
IOWA	2	9	42	43	4
KANS	13	15	4	31	37
KY	0	3	37	55	5
LA	2	29	40	29	0
MICH	4	6	20	45	25
MINN	6	8	43	42	1
MISS	5	30	45	17	3
MO	1	17	42	37	3
NEBR	13	37	17	33	0
N C	0	0	11	80	9
OHIO	3	13	40	38	6
S C	0	0	20	68	12
S DAK	1	6	36	47	10
TENN	2	2	39	57	0
19 STATE	3	10	34	46	7
PREV WEEK	1	7	29	54	9
PREV YEAR	7	25	45	21	2

COTTON

STATE	VP	P	F	G	EX
ALA	0	8	46	46	0
ARIZ	0	0	0	67	33
ARK	0	11	57	32	0
CALIF	0	0	5	90	5
GA	0	0	24	71	5
LA	0	9	52	39	0
MISS	0	25	55	20	0
MO	0	7	47	46	0
N MEX	0	0	25	65	10
N C	0	0	13	87	0
OKLA	0	0	70	30	0
S C	0	0	6	81	13
TENN	4	3	33	56	4
TEX	0	13	61	24	2
14 STATE	0	10	48	39	3
PREV WEEK	0	16	40	39	5
PREV YEAR	1	2	29	57	11

CORN

STATE	VP	P	F	G	EX
COLO	0	1	23	63	13
GA	0	1	7	63	29
ILL	0	3	23	62	12
IND	0	1	7	73	19
IOWA	2	13	39	43	3
KANS	16	1	7	52	24
KY	0	2	6	56	36
MICH	0	5	20	45	30
MINN	10	10	35	41	4
MO	10	14	36	37	3
NEBR	7	14	32	42	5
N C	0	0	6	67	27
OHIO	3	11	35	43	8
PA	3	11	23	35	28
S DAK	4	16	34	40	6
TEX	1	6	13	43	37
WIS	0	2	8	64	26
17 STATE	3	8	26	51	12
PREV WEEK	1	5	23	55	16
PREV YEAR	16	36	30	15	3

VP - VERY POOR P - POOR F - FAIR G - GOOD EX - EXCELLENT

State Summaries of Weather and Agriculture

These summaries provide brief descriptions of crop and weather conditions important on a national scale. More detailed data are available in Weather and Crop Bulletins published each Monday by NASS State Statistical Offices in cooperation with the National Weather Service.

ALABAMA: Most areas no rainfall; 0.25 to 0.50 in. local areas south. Temperatures 5 to 10° below normal.

Days suitable for fieldwork 6.2. Soil moisture 33% short, 63% adequate, 4% surplus. Dry conditions prevailed, additional moisture needed most areas. Corn 88% dented, 91% 1988, 94% avg.; 66% mature, 69% 1988, 74% avg.; 38% harvested, 44% 1988, 32% avg.; 3% fair, 49% good, 48% excellent. Cotton 93% setting bolls, 99% 1988, 99% avg.; 10% bolls opened, 12% 1988, 6% avg.; 8% poor, 46% fair, 46% good. Soybeans 62% blooming, 70% 1988, 73% avg.; 35% setting pods, 38% 1988, 38% avg.; 3% turning color, 7% 1988, 5% avg.; 14% poor, 32% fair, 52% good, 2% excellent. Peanuts 99% good, 1% excellent. Sorghum 16% harvested, 14% 1988, 9% avg.; 31% fair, 62% good, 7% excellent. Livestock, pastures good to excellent. Primary activities: Controlling insects, weeds in row crops; applying fungicides to peanuts, soybeans; harvesting corn, sorghum, summer potatoes, hay; planting fall vegetables, repairing harvest equipment; routine care of livestock, poultry, catfish.

ALASKA: Warm temperatures throughout, some showers limited 2nd crop haying. Highs, lows normal to 9° above normal. Seasonal precipitation 0.81 in. below normal at PMC Butte to 3.98 in. above normal at Big Delta.

Days suitable for haying 3.0. Topsoil 4% short, 87% adequate, 9% surplus. Subsoil 10% short, 90% adequate. Barley 90% turning color; 10% ripe, some swathing started. Barley condition 10% fair, 65% good, 25% excellent.

ARIZONA: Rainfall traces to 5.25 in.; temperatures 2° below to 4° above normal; dramatic increase in thunderstorm activity 7th over White Mountains, southeast; drifting westward, developed into several storms from Yavapai County to Mexican border. Thunderstorms extreme west, winds 45 to 55 mph, locally heavy rain; huge, intense storm developed southwest 9th, massive flooding Yuma.

Cotton crop good to excellent. Weeds light, insects light to moderate, controls applied for pink boll worms, whiteflies, armyworms, heliothis, cotton boll worms, lygus; irrigation main activity; severe storm hit Yuma, cotton quality to be affected on open bolls. Alfalfa harvest moderate to active; condition good, light rain damage Yuma County; weeds, insects, disease infestations reported light to moderate; hay, roughage supplies mostly surplus. Corn, sorghum good; 100% tasseling; sorghum 50% heading. Preparation of fields for fall vegetables slowed west due to wet soil; cantaloupe, honeydew melon harvests continued central; mixed melons, watermelons harvested Salt River Valley; apple harvest, packing began east; few watermelons harvested.

ARKANSAS: Temperatures well below normal. Numerous record low temperatures set. Mostly dry week. Extremes 48°; 94°. Rainfall none to 1.74 in.

Days suitable for fieldwork 7.0. Soil moisture 43% short, 57% adequate. Soybeans 100% planted, 100% 1988, 100% avg. Corn 9% fair, 58% good, 33% excellent. Main activities: Irrigating soybeans, cotton; applying fungicides to rice; applying insecticides to cotton; soybean tillage, weed control; fruit, vegetable harvest; pasture fertilization; cutting, baling hay; clipping pastures. Crop growth moderate, shallow root systems causing some crop wilt. Early planted cotton fields showed sign of cut-out. Cool weather slowed rice development, hindered grain fill on some acreage. Frogeye leaf spot disease in certain soybean varieties. Sorghum yield prospects appear excellent. Watermelons not harvested due to excess moisture in July. Pecan insect control continued. Hay yields above average, surplus supplies reported. Livestock good.

CALIFORNIA: Moist, tropical air bringing thunderstorm activity inland valleys, mountain areas. Many areas received significant rainfall. Accompanying storms isolated small hail. High pressure regained dominance.

Field activities slowed somewhat north, south, storms early in week. Rice heading progressed. Cotton good growth, most southern area fields show open bolls. Seed alfalfa harvest continued. Desiccants applied later fields. Small grain harvest underway late, high elevation fields. Good quality, yields. Storms 8th lodged some. Safflower, sugarbeet harvests ongoing. Chopping silage corn, Sudan grass increasing. Alfalfa harvest normal. Insect controls as needed. Picking Gravenstein apples, Sonoma County; Granny Smith harvest just beginning. Avocado picking slowed. Packing figs ongoing. Table grape harvest active, San Joaquin Valley. Wine grape harvest gaining momentum, San Joaquin Valley. Picking freestone peaches, plums, nectarines over 80 percent completed. Clingstone peach harvest active, drop possible from storm. Asian, Bartlett pear harvests continued. Prune harvest beginning. Picking grapefruit, non-desert areas. Valencia orange harvest slow. Almond harvest underway in some areas. Lettuce growers Huron District begun planting 1989 fall crop. Harvests both Salinas-Watsonville, Santa Maria areas ongoing. Supplies remained moderate, variable quality. Fall potato growers Klamath Basin experienced high winds, hail; however, fields California side State line escaped damage. Fall potato planting Perris-Hemet area ongoing. Summer potato harvest also continued full swing. Cauliflower supplies fairly light Salinas, Santa Maria area. Quality remained variable. Celery, broccoli harvests continued generally good quality. Processing tomato harvest continued Sacramento Valley, Kingsburg-Dinuba area. Cantaloupe, honeydew, mixed melon harvests also active in these areas. Strawberries continued moderate supply Salinas, fairly light supplies Santa Maria area with variable quality. Fields Merced-Atwater area being fumigated. Various peppers, squash, cucumbers, sweet corn, egg plant harvests continued throughout the State. Livestock fair to good, Statewide. Range, pasture water supplies dry, poor most valley areas. Feeding protein, mineral supplements helped augment declining pasture conditions. Northern counties feed, water supplies dwindling, but still adequate. Cattle moved to meadows already hayed.

COLORADO: Precipitation 0.10 to 1.70 in. Temperatures 5° below to 2° above normal.

Days suitable for fieldwork 5.6. Soil moisture 12% very short, 64% short, 22% adequate, 2%

surplus. Spring barley 83% ripe; 61% harvested. Oats 61% harvested. Dry onions 11% harvested. Dry beans 83% flowered. Summer potatoes 22% harvested. Sorghum 35% headed. Spring wheat 42% harvested. Livestock, range, pasture fair to good.

FLORIDA: Rainfall, Panhandle under 0.25 in.; few amounts about 1.00 in. near coast. Big Bend through remainder of Peninsula, most rain amounts 1.00 to 2.00 in.; local totals over 5.00 in. Temperatures 4 to 6° below normal across north, 1 to 2° below normal central, south. Extreme highs reached mid to upper 90s. Extreme lows low 60s Panhandle to mid to upper 60s elsewhere except for low, mid 70s southeast coast.

Soil moisture continued adequate Panhandle; short to surplus northern Peninsula; adequate central, southern Peninsula. Harvest active corn for grain, hay. Crop progress soybeans, peanuts, sugarcane good. Grazing good to excellent, except northern Peninsula fair to good. Cattle good to excellent. Citrus groves, trees very good. Hard rains most areas aided new fruit growth. Early bloom fruit very good progress; fruit drop not excessive. Caretakers plowed bedded groves for water control. Summer sprays, fertilization continued. Hot days, warm nights, scattered showers over vegetable producing areas. Land preparation continued very active all areas. Crops being planted include tomatoes, peppers, celery, eggplant.

GEORGIA: Rain confined to northeast mountains, south third. Heaviest rains southeast counties 2.00 to 4.00 in. common. Over 4.00 in. Homerville, Sapelo Island, Moody Air Force Base, Doctortown. Central Georgia no rain. Below normal temperatures all but first day of week. Temperatures 6 to 9° below normal. Coolest upper 50s to low 60s. Lows 50° mountains. Warmest low 80s mountains, upper 90s extreme south.

Days suitable for fieldwork 5.9. Soil moisture 35% short, 62% adequate, 3% surplus. Corn 66% mature, 80% 1988, 88% avg.; 16% harvested, 16% 1988, 30% avg.; harvest active. Spraying cotton for insects. Peanuts 8% fair, 86% good, 6% excellent; leafspot control on peanuts. Soybean insect pressure increasing. Tobacco 8% poor, 7% fair, 62% good, 23% excellent; 81% harvested, 64% 1988, 73% avg.; harvest active. Watermelons 95% harvested, 94% 1988, 97% avg. Apples 61% fair, 35% good, 4% excellent; 18% harvested, 23% 1988, 29% avg. Peaches 98% harvested, 99% 1988, 99% avg. Pecans 5% poor, 40% fair, 53% good, 2% excellent. Haying very active. Pasture, hay good to excellent. Cattle, hogs good.

HAWAII: Hot, humid weather mixed effect on Agriculture. Heavy spraying for insect control, irrigation necessary. Temperatures high 60s to low 90s with variable winds 5-20 mph. Rainfall none to 2.60 in.

Days suitable for fieldwork 7.0. Papaya production steady. Continuous production of sugar, pineapple. Banana production continued to increase seasonally.

IDAHO: Temperatures near to 8° above normal. Highs close to, over 100°. Scattered showers across State; isolated areas over an inch of precipitation.

Days suitable for fieldwork 6.0. Soil moisture 6% very short, 18% short, 76% adequate. Potato harvesting underway in Southwest, 33% turning, very little show vines dying. Winter wheat 33% harvested, 62% 1988, 47% avg. Spring wheat 19% harvested, 55% 1988, 25% avg. Spring barley 28% harvested, 54% 1988, 31% avg. Oats 33% harvested, 50% 1988, 36% avg. 2nd cutting alfalfa 77% harvested, 81% 1988, 71% avg.; 3rd cutting alfalfa underway. Lentils 5% harvested, 49% avg. Dry peas 20% harvested, 62% avg. Peaches 44% harvested. Mint over 80% harvested. Grasshopper, aphid infestations high in East. Dry, hot weather deteriorated range, pastures. Scattered showers help lessen stress on forage. Livestock good.

ILLINOIS: Temperatures 2 to 10° below normal. Precipitation none most areas, few scattered showers mostly northeast.

Days suitable for fieldwork 6.50. Soil moisture 79% short, 21% adequate. Soybeans turning color 3%, 4% 1988, 3% avg. Alfalfa 3rd crop cut 55%, 50% 1988, 47% avg.; 5% poor, 39% fair, 51% good, 5% excellent. Pasture 7% very poor, 17% poor, 49% fair, 24% good, 3% excellent.

INDIANA: Temperatures 4 to 7° below normal. Lows low to mid 50s, highs upper 70s to low 80s. Scattered thunderstorms. Totals up to 1.50 in.

Days suitable for fieldwork 6.1. Topsoil 32% short, 68% adequate. Subsoil 15% short, 85% adequate. Corn, soybean good. Alfalfa hay 92% cut twice, 98% 1988, 98% avg. Pasture 4% poor, 29% fair, 59% good, 8% excellent. Some areas becoming progressively drier due to lack of rain.

IOWA: Temperatures 2 to 5° below normal. Extremes 44°; 89°. Rainfall none to 2.08 in., average .23 in.

Days suitable for fieldwork 6.7. Topsoil 92% short, 8% adequate; subsoil 100% short. Corn 86% in milk stage, 95% 1988, 88% avg. Third crop alfalfa 30% harvested, 36% 1988, 22% avg. Second crop clover 95% harvested, 96% 1988, 86% avg. Hay 8% very poor, 31% poor, 42% fair, 18% good, 1% excellent. Livestock good. Pasture 29% very poor, 39% poor, 27% fair, 4% good, 1% excellent.

KANSAS: Temperatures much below normal, southern third 10 to 12° below, northwest 5°, remainder 8 to 9° below.

Days suitable for fieldwork 6.5. Topsoil 70% short, 30% adequate. Subsoil 51% short, 49% adequate. Corn silking 98%, dough stage 65%, dent stage 25%. Sorghum headed reached 30 percent. Chinch bug infestation heavy few dry areas. Soybean blooming 80%, podding 45%. Third cutting alfalfa 75% complete, fourth cutting beginning.

KENTUCKY: High pressure brought clear, sunny conditions. slightly cooler than normal.

Days suitable fieldwork 5.5. Soil moisture 2% very short, 20% short, 78% adequate. Corn good to excellent, 23% denting or beyond. Soybeans fair to good, 70% blooming or beyond. Rain would be beneficial, especially double crop beans. Tobacco fair, slight improvement. Burley 10% cut, 3% 1988, 8% avg. Dark tobacco 5% cut. Excellent week hay harvest. Pasture 1% very poor, 1% poor, 13% fair, 58% good, 27% excellent.

LOUISIANA: Temperatures 5 to 6° below normal. Extremes 54°; 98°. Rainfall none to 1.59 in.

Days suitable for fieldwork 5.5. Soil moisture 6% short, 83% adequate, 11% surplus. Corn mature 90%, 81% 1988, 84% avg.; harvested 25%, 14% 1988, 29% avg.; 30% fair, 65% good, 5% excellent. Cotton setting bolls 93%, 96% 1988, 98% avg.; open bolls 0%, 7% 1988, 12% avg.; 9% poor, 52% fair, 39% good 0% excellent. Hay final cutting 15%, 10% 1988, 21% avg. Rice headed 84%, 78% 1988, 87% avg.; ripe 37%, 28% 1988, 39% avg.; harvested 21%, 17% 1988, 27% avg.; 4% poor, 54% fair, 38% good, 4% excellent. Yields reported as generally lower than last year. Sorghum headed 93%, 87% 1988, 96% avg.; turning color 59%, 40% 1988, 71% avg.; ripe 13%, 10% 1988, 35% avg.; harvested 1%, 0% 1988, 14% avg.; 14% poor, 36%

fair, 50% good. Soybeans blooming 80%, 68% 1988, 82% avg.; setting pods 49%, 41% 1988, 59% avg.; 2% very poor, 29% poor, 40% fair, 29% good. Sugarcane planted 1%, 1% 1988, 1% avg.; 6% poor, 17% fair, 71% good, 6% excellent. Sweet potatoes harvested 7%, 8% 1988, 12% avg.; 5% poor, 53% fair, 42% good. Vegetable 2% very poor, 20% poor, 57% fair, 21% good. Pasture 11% fair, 87% good, 2% excellent. Livestock 10% fair, 87% good, 3% excellent.

MARYLAND & DELAWARE: MARYLAND: Precipitation 0.40 in. Temperatures 72°, normal 76°. Extremes 39°; 95°.

Days suitable for fieldwork 4.6. Topsoil 10% short, 55% adequate, 35% surplus. Subsoil 5% short, 80% adequate, 15% surplus. Field corn good; silked 82%, 95% 1988, 93% avg.; dough stage 46%, 46% 1988, 62% avg.; dent stage 15%, 18% 1988, 24% avg.. Soybeans good; bloomed 65%, 62% 1988, 60% avg.; set pods 41%, 31% 1988, 34% avg. Tobacco fair to good; bloomed 61%, 77% 1988, 72% avg. Pasture good to excellent.

DELAWARE: Precipitation 1.04 in. Temperatures 73°, normal 77°. Extremes 53°; 97°.

Days suitable for fieldwork 3.7. Topsoil 67% adequate, 33% surplus. Subsoil 50% adequate, 50% surplus. Soybeans good; bloomed 65%, 44% 1988, 61% avg.; set pods 7%, 41% 1988, 49% avg. Field corn good to excellent; dough stage 70%, 35% 1988, 60% avg.; dent stage 20%, 16% 1988, 33% avg. Pasture good. All hay supplies short to adequate.

MICHIGAN: Temperatures 6° below normal to normal. Extremes 39°; 79°. Precipitation none to 1.82 in. across State.

Days suitable for fieldwork 6.0. Soil moisture 30% short, 65% adequate, 5% surplus. Corn 95% silked, 100% 1988, 96% avg.; dough 5%, 15% 1988, 30% avg.; dent 0%, 2% 1988, 4% avg.; 5% poor, 20% fair, 45% good, 30% excellent. Soybeans 85% blooming, 90% 1988, 95% avg.; setting pods 40%, 50% 1988, 55% avg.; 4% very poor, 6% poor, 20% fair, 45% good, 25% excellent. Dry Beans setting pods 35%, 40% 1988, 50% avg.; 3% very poor, 7% poor, 25% fair, 50% good, 15 % excellent. Winter Wheat 100% harvested, 100% 1988, 99% avg. Major activities: Small grain combining, baling hay, straw, spraying for insects, weeds, preparing wheat ground for fall planting. Tart Cherry harvest is virtually complete except for the northernmost areas of the State. Early apples are now being harvested. Recent cool nights are conducive to good color. Vegetable growers are busy harvesting peppers, carrots, celery, sweet corn, tomatoes.

MINNESOTA: Temperatures 1 to 4° above normal for the northern 1/3 of State near normal to 2° below normal elsewhere. Extremes 39°; 95°. Precipitation averaged 0.17 to 1.01 in. Greatest weekly total 3.70 in.

Days suitable for fieldwork 6.5. Topsoil 64% very short, 27% short 9% adequate. Spring wheat 79% cut, 99% 1988, 71% avg.; 69% combined, 87% 1988, 50% avg. Oats 99% cut, 99% 1988, 91% avg.; 92% combined, 95% 1988, 77% avg. Barley 98% cut, 98% 1988, 86% avg.; 93% combined, 94% 1988, 68% avg. Corn 82% in milk, 94% 1988, 81% avg.; 23% in dough, 66% 1988, 39% avg. Soybeans 91% setting pods, 98% 1988, 84% avg. Sweet corn 29% harvested, 50% 1988, 36% avg. Corn 10% very poor, 10% poor, 35% fair, 41% good, 4% excellent. Spring wheat 2% very poor, 9% poor, 53% fair, 30% good, 6% excellent. Soybean 6% very poor, 8% poor, 43% fair, 42% good, 1% excellent. Alfalfa 23% very poor, 32% poor, 34% fair, 10% good, 1% excellent.

MISSISSIPPI: Cool, dry. Temperatures 6° below normal. Extremes 49°; 99°. Rainfall 0.27 in., 0.57 in. below normal.

Days suitable for fieldwork 5.6, 5.3 1988, 4.7 avg. Soil moisture 20% short, 75% adequate, 5% surplus. Corn good; 26% mature, 32% 1988, 43% avg.; 4% harvested, 0% 1988, 8% avg.; silage 31% harvested, 42% 1988, 50% avg. Cotton fair; 89% setting bolls, 97% 1988, 98% avg.; 0% open bolls, 3% 1988, 6% avg. Hay 57% harvested, 65% 1988, 70% avg. Peaches 95% harvested, 94% 1988, 95% avg. Rice good; 69% heading, 62% 1988, 79% avg. Sorghum good; 10% mature, 4% 1988, 19% avg.; silage 29% harvested, 32% 1988, 30% avg. Soybeans fair; 57% blooming, 57% 1988, 73% avg. Sweet potato harvest beginning. Pastures, livestock good. Activities: Clear weather allowed haying, silage harvest, corn harvest, cotton insecticide applications (weevils). Irrigation beginning.

MISSOURI: Temperatures 7 to 10° below normal State. Very dry except 0.30 in. southeast.

Days suitable for fieldwork 6.6. Topsoil 77% short, 23% adequate. Subsoil 72% short, 28% adequate. Crop conditions deteriorated from week earlier. Most areas need rain. Northwest worst condition. Corn dough stage 65% northeast to 100% southeast. Corn dent 21% northeast to 83% southeast; mature 21% southeast, others 0% to 12%, Soybeans 2% turning color. Sorghum 69% coloring southeast, others 9% to 22%. Cotton bolls opening 1%. Alfalfa third cutting 65%, 69% avg., 73% 1988. Other hay harvested 93%, 100% 1988, 99% avg. Pasture 6% very poor, 18% poor, 45% fair, 29% good, 2% excellent. Livestock water supply 19% critically short, 23% short, 58% adequate.

MONTANA: Temperatures 1 to 5° above normal. Thunderstorms caused wide range in precipitation. Heavier rainfall in southwest, none to 1.19 in.

Days suitable for fieldwork 6.6. Topsoil 63% short, 37% adequate. Subsoil 59% short, 41% adequate. Winter wheat 2% very poor, 6% poor, 21% fair, 49% good, 22% excellent. Barley 2% very poor, 7% poor, 21% fair, 49% good, 21% excellent; harvested 17%, 54% 1988, 32% avg. Oats 4% very poor, 11% poor, 26% fair, 45% good, 14% excellent; harvested 12%, 61% 1988, 14% avg. Second cutting alfalfa 46% harvested, 72% 1988, 52% avg. Other hay 84% cut, 86% 1988, 88% avg. Pasture, range feed 3% very poor, 9% poor, 29% fair, 49% good, 10% excellent.

NEBRASKA: Temperatures 2 to 6° below normal. Extremes 40°; 94°. Precipitation occurred latter half of week trace to 1.24 in. north.

Days suitable for fieldwork 5.5. Topsoil 96% short, 4% adequate. Subsoil 100% short. Alfalfa hay 15% very poor, 19% poor, 54% fair, 12% good. 60% third cutting, 57% 1988, 41% avg. Producers in north, northeast report about average yields. Spider mites in corn fields in Panhandle. Chinch bugs still causing severe damage to sorghum in southeast. Spraying rootworm beetles south central. Spider mites, grasshoppers, rootworms causing damage northeast. Sorghum in east not producing heads due to drought stress. Eastern third of State cutting some poor dryland corn for silage to salvage some feed. Concern about poor yield prospects in east, southeast as beans move into critical pod fill stage with very little moisture available. Main activities: Cutting hay; insect, weed control; irrigating. Pasture, range feed supplies 26% very short, 70% short, 4% adequate. Hay, roughage supplies 14% very short, 69% short, 17% adequate. Livestock in good shape with milder temperatures, flies still a problem in northeast.

NEVADA: Widespread significant rainfall all areas except northwest early. Widespread clouds, showers lowered daytime temperatures considerably first half. Temperatures close to normal west, south; 3 to 5° above normal northeast. Extremes 38°; 114°.

Garlic harvest completed. Growers working on remaining acreage small grains, hay, onions, melons. Fall potato crop developing well.

NEW ENGLAND: Heavy precipitation 3.50 to 6.00 in. southern New England to 0.75 to 4.00 in. northern New England. Extreme 5.78 in. Connecticut. Temperatures normal; low 60s interior New England to upper 60s coastal areas.

Days suitable for fieldwork 4.5. Fieldwork progress 2.5 days behind. Soil moisture north 24% short, 47% adequate, 29% surplus; south 13% short, 25% adequate, 62% surplus.. Grazing availability north 44% short, 56% adequate; south 60% adequate, 40% surplus. Maine, Connecticut River Valley potato good. Maine oat good. Field corn fair to excellent. Sweet corn 40% harvested, 35% 1988, 36% avg.; good. Shade tobacco 35% harvested; good. Outdoor tobacco 20% harvested; good. Second crop hay 46% cut, 58% 1988, 58% avg.; good. Apple good; peach fair to good; pear good. Raspberries 97% harvested; fair to good. Blueberries 61% picked; fair to good. Fruit sizing: apples medium, raspberries medium, blueberries medium to large. Cranberry good. Limited farm activity included haying, vegetable harvesting.

NEW JERSEY: Temperatures much below normal. Extremes 41°; 91°. Rainfall 1.93 in. north, 3.16 in. central, 3.45 in. south. Heaviest 24-hour total 2.45 in. on 11th, 12th. Estimated soil moisture percent field capacity averaged 82% north, 76% central, 84% south. Four inch soil temperatures averaged 67° north, 70° central, 72° south.

Rainfall frequent but amount widely varied. Temperatures also varied. Wet conditions limited fieldwork, caused additional production losses. Fall vegetable planting well advanced some fields continued wet. Summer vegetable harvest progressed. Wet soils hampered irish potato digging. Rain delayed oat combining. Third cutting hay made. Pasture growth good.

NEW MEXICO: Temperatures a few degrees below normal most areas. Thundershowers brought precipitation to most areas.

Days suitable for fieldwork 6.3 Soil moisture 70% short, 30% adequate. Cotton setting bolls, 95%, 2% bolls open; 25% fair, 65% good, 10% excellent. Cattle 78% fair, 22% good. Sheep 86% fair, 14% good. Ranges, pastures 40% poor, 60% fair.

NEW YORK: Hot, humid cooler air moved in, lasted through the week. In the middle of the week there was record cool weather at night. Heavy rain fell in southeastern areas late in week. It was relatively dry in other areas.

Days suitable for fieldwork 6.1. Soil moisture adequate. Corn good. Pastures fair, hay good. Second cutting alfalfa 53% complete, 66% 1988, 62% avg. Oats 44% harvested, 43% 1988, 32% avg. Early apple varieties, peaches being picked. Size, quality good. Vegetable harvesting gaining momentum. Early snap bean harvest complete. Orange County onion harvest underway.

NORTH CAROLINA: Temperatures 5 to 8° below normal across State. Extremes 40°; 97°. Precipitation none to 4.93 in.

Days suitable for fieldwork 5.1. Soil moisture 4% short, 90% adequate, 6% surplus. Pasture 11% fair, 73% good, 16% excellent. Livestock feed from pasture 80%. Crop conditions: tobacco 5% poor, 42% fair, 53% good; sweet potatoes 14% fair, 84% good, 2% excellent; apples 14% poor, 18% fair, 68% good; truck crops 2% poor, 25% fair, 71% good, 2% excellent; peanuts 21% fair, 75% good, 4% excellent; sorghum 17% fair, 72% good, 11% excellent; hay 12% fair, 79% good, 9% excellent. Hay second cutting 63% complete, third cutting 27% completed. Hay, roughage 80% adequate, 20% surplus. Harvesting completed: peaches 88%, 79% 1988, 85% avg.; tobacco 34%, 30% 1988, 30% avg. -94% topped; corn silage 19%, 18% 1988, 20% avg. Major activities: Topping, spraying, harvesting tobacco; cutting hay. Other activities: spraying crops; harvesting peaches, truck crops; marketing tobacco, vegetables, peaches; tending livestock; general farm maintenance.

NORTH DAKOTA: Temperatures 3° below to 2° above average. Precipitation 0.32 in or less. State below average for growing season, -2.05 southeast to -4.83 east central.

Days suitable for fieldwork 6.6. Topsoil well below average, 59% very short, 41% short; 5 year average 20% very short, 30% short, 47% adequate, 3% surplus; subsoil well below average, 77% very short, 23% short; average 24% very short, 28% short, 47% adequate, 1% surplus. Small grains fair to poor. Harvest ahead of average. Spring wheat 13% very poor, 14% poor, 64% fair and 9% good; durum 9%, 24%, 60%, 7%; oats 20%, 24%, 52%, 4%; barley 10%, 17%, 69%, 4%; flax 13%, 32%, 55%, none; corn 2%, 18%, 50%, 30%; sunflower 10%, 32%, 52%, 6%; dry edible beans 1%, 61%, 34%, 4%; soybeans 1%, 20%, 62%, 17%; potatoes 75% poor, 25% fair. Spring wheat 63% combined, 87% 1988, 39% avg.; durum 42%, 69% 1988, 25% avg.; oats 69%, 91% 1988, 51% avg.; barley 84%, 92% 1988, 61% avg. Row crops still stressed; dry edible beans 70% fully podded & beyond, 76% 1988, 67% avg.; flax 69% turning ripe & beyond, 74% 1988, 56% avg.; sunflower 12% flowers dried & beyond, 35% 1988, 13% avg.; potatoes 49% rows filled, 85% 1988, 81% avg. Pasture 21% very poor, 51% poor, 26% fair, 2% good. Poor second cutting alfalfa.

OHIO: High temperatures upper 70s to mid 80s. Low temperatures mostly in 40s, with some low 50s. Temperatures 3 to 5° below normal in north; up to 9° below normal in south. Rainfall none to 0.54 in. southwest, with most areas receiving less than 0.05 in. Base 50 growing degree days totaled 110 to 130 units, 20 to 50 units below normal for the week.

Days suitable for fieldwork 5.9. Soil moisture 12% short, 77% adequate, 11% surplus. Activities: Making second, third cuts of hay, harvesting oats, baling wheat, oat straw, mowing pasture, seeding alfalfa, topping tobacco. Cool weather caused concern for late-planted crops, which need an extended growing season for full maturity. Corn fair to good. Rapid growth of corn in July caused stalks to become brittle, with shallow root systems, leaving plants susceptible to lodging, wilting. Soybeans fair to good; problems with fungus, insects. Soybeans suffering from nitrogen depletion, caused by runoff from heavy rains earlier this season. Pasture, hay, potatoes fair to good. Processing, fresh market vegetables harvested in northwest, including cucumbers, green beans, melons, sweet corn, potatoes, tomatoes.

OKLAHOMA: Temperatures 13° below normal north central to 10° below normal east central. Precipitation 0.04 in. southeast to 2.52 in. central.

Days suitable for fieldwork 5.8. Topsoil 15% short, 70% adequate, 15% surplus. Subsoil 5% short, 95% adequate. Wheat 100% harvested, 100%

1988, 100% avg.; Cool temperatures, ample moisture may quicken seedings. Cotton 70% fair, 30% good, 55% setting bolls, 85% 1988, 60% avg. Sorghum 5% fair, 95% good, excellent; 65% heading, 50% 1988, 65% avg.; 20% coloring, 25% 1988, 25% avg. Soybeans 35% setting pods, 25% 1988, 40% avg. Peanuts 45% setting pods, 60% 1988, 75% avg. Corn 10% mature, 20% 1988, 30% avg. Rain, cool temperatures slowed row crop development progress. Pastures good. Cattle good; marketings stable, prices up from preceding week.

OREGON: Temperatures above normal entire State, except southern coast. Greatest precipitation, 0.50 to 0.75 in., northeast, south central regions. Severe thunderstorm brought tornado-like winds, hail to Merrill area; caused much crop, property damage.

Soil moisture 75% short, 23% adequate. Winter wheat 38% poor, 36% fair, 26% good. Barley 55% harvested, 69% 1988, 73% avg. Grass seed harvest neared completion Willamette Valley, northeast area; rains slowed progress, yields below average. Sugarbeet seed harvest progressed west. Mint harvest started Willamette Valley. Grain combining, hay cutting continued most areas. Wind, hail damaged grain, hay Merrill area. Evergreen blackberry harvest in full swing Willamette Valley; other berries mainly done. Strawberry fields mowed; some raspberry pruning started. Veteran peaches left to harvest west. Apples, pears developing well Hood River, Medford, Milton-Freewater. Cranberries sizing well with favorable weather south coast. Hazelnuts, walnuts sizing nicely Willamette Valley; walnut husk fly emerged. Potato harvest continued Hermiston-Boardman. Early blight, black dot infestations noted in Klamath Basin potato fields; also some had hail or wind damage near Merrill. Sweet corn harvest underway Willamette Valley; snap bean harvest continued, excellent yields; also broccoli, summer squash; late processing vegetable plantings winding down. Livestock good to excellent. Range, pasture mostly fair; need rain east despite up to 0.75 inch rain during week; started to dry up west. Feeder cattle mostly moved to feedlots west.

PENNSYLVANIA: Cooler, drier than normal. Week started warm, cold high anchored over State rest of week. Temperature 64°, 7° below normal. Extremes 36°; 94°. Precipitation 0.41 in., 0.44 in. below normal.

Days suitable for fieldwork 5.0. Soil moisture 10% short, 82% adequate, 8% surplus. Corn 62% silk, 77% 1988, 87% avg; 9% dough, 14% 1988, 33% avg.; none dent, 1% 1988, 5% avg.; Ensilage corn harvested none complete, 6% 1988. Corn 3% very poor, 11% poor, 23% fair, 35% good, 28% excellent. Soybean 2% very poor, 6% poor, 26% fair, 46% good, 20% excellent. Wheat harvest 92% complete; 97% 1988. Oat harvest 61% complete, 79% 1988. Barley harvest 98% complete, 99% 1988. Tobacco harvest 4% complete, 10% 1988. Potato harvest 21% complete, 12% 1988. Second cutting alfalfa 62% complete, 87% 1988. Third cutting alfalfa 23% complete, 31% 1988. Second cutting clover-timothy 37% complete, 64% 1988. Quality of hay made fair. Feed from pastures average. Apple harvest 13% complete, 8% 1988. Peach harvest 27% complete, 31% 1988. Fall plowing 9% complete, 13% 1988. Activities: Harvesting hay, haylage, barley, wheat, oats, potatoes, apples, peaches, vegetables, fall plowing, weed control; maintaining machinery; caring for livestock.

PUERTO RICO: Rainfall 1.06 in. was 0.40 in. below normal. Highest rainfall was 3.63 in. at Pico Del Este-Luquillo, 2.73 in. at Fajardo, 2.47 in. at San Sebastian. San Juan WSFO mean temperature 83° plus 0.6 total rainfall 0.11 minus 1.18. Temperatures 81 to 80° on Coast, 75 to 78° in Interior. Extremes 61°; 95°.

SOUTH CAROLINA: Rainfall less than 0.50 in. statewide. Temperatures 10° below normal.

Days suitable for fieldwork 5.7. Soil moisture 29% short, 69% adequate, 2% surplus. Cotton 6% fair, 81% good, 13% excellent; 87% setting bolls, 80% 1988, 91% avg.; 6% open bolls, 0% 1988, 2% avg. Soybeans 20% fair, 68% good, 12% excellent; 52% blooming, 65% 1988, 62% avg.; 21% setting pods, 21% 1988, 26% avg. Tobacco good; 49% harvested, 53% 1988, 58% avg.; 2% stalks destroyed, 1% 1988, 2% avg. Corn good; 90% dough stage, 90% 1988, 96% avg.; 58% matured, 38% 1988, 62% avg.; 7% harvested, 5% 1988, 10% avg. Sorghum good; 15% harvested, 7% 1988, 9% avg. Watermelons good; 87% harvested, 90% 1988, 91% avg. Peaches fair to good; 82% harvested, 87% 1988, 90% avg. Peanuts good. Hay, pastures good.

SOUTH DAKOTA: Temperatures 6° below normal to 2° above normal. Extremes 30°; 97°. Growing season precipitation generally below normal; range 3.05 in. above normal to 6.08 in. below normal. Past week generally 0.25 to 0.75 in. precipitation.

Days suitable for fieldwork 6.1. Topsoil 50% critically short, 42% short, 8% adequate. Subsoil 57% critically short, 41% short, 2% adequate. Corn good to fair. Sorghum fair to poor. Soybean good to fair. Major activities: Harvesting straw, fall tillage, feeding cattle fencing.

TENNESSEE: Cold front moved out of State 7th, high pressure dominated remainder of week. Unseasonably cool temperatures first half of week with record lows statewide. Warmer last half of week, still below normal. Dry most of week. Scattered thundershowers 10th Middle, Plateau.

Days suitable for fieldwork 5.3. Soil moisture 24% short, 75% adequate, 1% surplus. Corn 78% dough, 73% 1988, 82% avg.; 40% dent, 40% 1988, 49% avg.; 8% mature, 5% 1988, 12% avg.; 15% fair, 64% good, 21% excellent. Tobacco 54% topped, 42% 1988, 57% avg. Burley 10% harvested, 4% 1988, 10% avg. Dark fired 8% harvested, 2% 1988, 7% avg. Dark air-cured 8% harvested, 4% 1988, 7% avg. Alfalfa Record cold slowed cotton growth. Fruit, vegetable harvest continues.

TEXAS: Unusual push cool air lowered temperatures well below normal for this time of year. Front stalled Coastal Bend, Lower Rio Grande Valley triggering showers during middle week. Several record low temperatures especially north, south Texas. Southerly flow returned, conditions returned to near normal over weekend. Temperatures well below normal. Rainfall above normal High Plains, Edwards Plateau, North Texas, Lower Rio Grande Valley. Elsewhere, below normal.

Crops: Corn harvest slowed early week Blacklands, Central; midweek activity increased. Yields average. Harvest resumed Upper Coast after previous weeks rains. Progress good to excellent High Plains, despite cooler temperatures, fields beginning to dent. Harvest activity about over Coastal Bend, south. Corn 58% mature, 65% 1988, 61% avg.; 43% harvested, 48% 1988, 39% avg. Grain sorghum harvest completed many areas south, Coastal Bend. Harvest winding down central, Upper Coast. Prospects remained good, harvest continued after some delays Blacklands. Harvest good pace Cross Timbers, Low Plains. Early fields beginning turn color High Plains. Prospects improved with additional rain. Grain sorghum mature 54%, 54% 1988, 55% avg.; harvested 43%, 50% 1988, 49% avg. Cotton progress slower

than normal High Plains as cooler temperatures arrived early week. Overall condition area improved some with added moisture. Spraying activity increased as insect activity increased. Bolls beginning to open Blacklands, spraying for boll weevils continued. Harvest beginning parts central, bolls continued open. Harvest winding down Coastal Bend. Harvest continued without much delay Valley. Cotton squaring 97%, 100% 1988, 98% avg.; harvested 7%, 8% 1988, 6%. Rice harvest continued Upper Coast. Areas still drying out from previous rains. Yields could still be affected in fields where heavy rains fell. Rice 31% harvested, 33% 1988, 38% avg. Peanut fields most areas make good progress last week. Fields pegging Blacklands, Cross Timbers. Heavy irrigation necessary, scattered showers helped alleviate moisture need. Most central fields look good, some leaf spot. Harvest begin soon south central. Soybeans continued good progress Plains, where irrigation remained steady. Herbicide damage showing up. Harvest early varieties continued Upper Coast. Later varieties setting pods.

Commercial Vegetables: Rio Grande Valley, celery, lettuce, tomato planting, transplanting continued. Fruit development citrus groves slow because hot, dry conditions. East area, sweet potato harvest increasing with good yields. Watermelon harvest continued. Trans-Pecos, late season cantaloupe harvest continued. Onion harvest beginning wind down. Peppers blooming. High Plains, onion, potato harvest about complete. Carrot harvest increasing. Pecans continued mature many areas. Heavier than normal drop continued drier regions. Insect controls continued. Recent rains should help crop some areas.

Range and Livestock: Recent rainfall, cooler temperatures helped conditions many areas. Showers slowed haying activities beginning week. Producers still feeding livestock areas where little forage available. Shearing activities increasing Hill Country. Shipping activities continued.

UTAH: Temperatures 2° above normal. Precipitation mostly light except moderate western, Dixie Divisions.

Days suitable for fieldwork 6.2. Soil moisture 90% short, 10% adequate. Winter wheat 85% harvested, 91% 1988, 78% avg. Barley 68% harvested, 82% 1988, 66% avg. Spring wheat 54% harvested, 75% 1988, 54% avg. Oats 75% ripe, 81% 1988, 63% avg. Oats for grain 30% harvested, 39% 1988, 35% avg. Oats for hay 76% harvested, 74% 1988, 69% avg. Corn tasseled 70%, 94% 1988, 82% avg.; dough stage 22%, 23% 1988, 27% avg. Alfalfa hay second cutting 94% completed, 92% 1988, 88% avg. Third crop hay nearing maturity. Mild thunderstorms interfered with combining some locations. Moisture relieved stressed ranges in local areas; generally pasture, range conditions remained short. Apple, pear crop prospects good.

VIRGINIA: Very warm then very cold. Temperatures 38° west to 97° north. Rainfall 0.50 in. most areas, up to 5.30 in.

Days suitable for fieldwork 4.8. Topsoil 10% short, 81% adequate, 9% surplus. Soybeans 60% bloomed, 37% 1988, 48% avg. Soybeans 40% set pods, 15% 1988, 23% avg. Corn 87% silked, 73% 1988, 82% avg. Corn 60% at or beyond dough stage, 36% 1988, 45% avg. Corn 30% at or beyond dent stage, 15% 1988, 24% avg. Flue-cured tobacco harvest 16% complete. Fire-cured tobacco harvest underway. Peach, apple harvest in progress. Soybean 26% fair, 57% good, 17% excellent. Corn 12% fair, 65% good, 23% excellent. Tobacco 10% poor, 15% fair, 40% good, 35% excellent. Pastures 18% fair, 65% good, 17% excellent. Alfalfa 7% fair, 72% good, 21% excellent. Other hay 14% fair, 64% good, 22% excellent. Livestock 7% fair, 80% good, 13% excellent.

WASHINGTON: Temperatures normal to 5° above normal, east; normal to 4° above normal, west. Precipitation none to 1.72 in., east; none to 0.02 in., west.

Days suitable for fieldwork, 6.2. Soil moisture 45% short, 55% adequate. Range, pasture 25% short, 75% adequate. Hay, other roughage 6% short, 82% adequate, 12% surplus. The cereal grain harvest continued. Winter wheat harvested 63%, 63% 1988, 65% avg. Spring wheat harvested 45%, 46% 1988, 52% avg. Barley harvested 65%, 65% 1988, 66% avg. Other crops harvested: Potato harvested 11%, 12% 1988, 12% avg.; second cutting alfalfa hay 95%, 89% 1988, 91% avg; third cutting alfalfa hay 25%, 24% 1988, 20% avg. Major activities: Cutting hay, weed control, irrigation; harvest of apricots, peaches, Bartlett pears, blueberries, raspberries, strawberries, vegetable seeds, cauliflower, broccoli, carrots, leafy vegetables, green peas, mint, dry peas, lentils.

WEST VIRGINIA: Temperature 64°, 5 to 10° below normal. Extremes low 38°; 97°. Precipitation 0.21 in.; 0.31 to 0.94 in. below normal.

Days suitable for fieldwork 5.0. Soil moisture 96% adequate, 4% surplus. Corn good to excellent; 74% silked, 25% dough stage. Wheat good to fair; 90% harvested. Barley good; harvest complete. Oats good; 94% ripe, 57% harvested. Tobacco poor to fair; 24% topped. Apples fair. Peaches poor. Hay good to fair. 1st cut 88% complete, 2nd cut 31% complete. Farm activities: Hay harvest, small grains harvest, topping tobacco, clipping pastures.

WISCONSIN: Temperature 67°, 2° below normal. Extremes: 37°; 91°. Precipitation 0.20 to 3.50.

Days suitable for fieldwork 6.3. Soil moisture 46% short, 54% adequate. Pasture 68% of normal, 29% 1988, 66% 5-year avg. General condition of crops 2% poor, 17% fair, 73% good, 8% excellent. Soybean 10% fair, 72% good, 18% excellent. Corn 2% poor, 8% fair, 64% good, 26% excellent; 88% silked, 88% 1988, 90% avg.; dough 23%, 44% 1988, 38% avg. Oats 61% harvested, 83% 1988, 68% avg. Second cut hay 81% completed, 79% 1988, 77% avg. Third cut hay 7% completed, 15% 1988, 10% avg. Winter wheat harvest 87% completed, 98% 1988, 91% avg.

WYOMING: Temperatures near normal. Rainfall above normal southeast, mostly below normal elsewhere.

Days suitable for fieldwork 6.0. Topsoil 94% short, 16% adequate. Winter wheat 15% mature, 5% 1988, 5% avg.; 85% harvested, 95% 1988, 95% avg. Barley 15% turning color, 5% 1988, 15% avg.; 40% mature, 20% 1988, 30% avg.; 45% harvested, 75% 1988, 55% avg. Spring wheat 5% turning color, 0% 1988, 10% avg.; 55% mature, 25% 1988, 35% avg.; 40% harvested, 75% 1988, 55% avg. Oats 20% turning color, 15% 1988, 25% avg.; 45% mature, 40% 1988, 40% avg.; 35% harvested, 45% 1988, 35% avg. Alfalfa second-cutting 50% complete, 60% 1988, 55% avg. Other hays 75% harvested, 90% 1988, 80% avg. Potatoes most in bloom, 100% 1988, 95% avg. Dry beans 85% in bloom, 100% 1988, 90% avg; 75% setting pods, 85% 1988, 90% avg; 10% leaves turning color, 10% 1988, 15% avg. Corn 70% tasseled, 100% 1988, 85% avg.; 60% silked, 90% 1988, 75% avg; 45% milk, 65% 1988, 50% avg; 10% dough, 30% 1988, 25% avg. Livestock to be wintered: cattle 90% of 1988, sheep 95% of 1988. Ranges, pastures fair. Stockwater supplies 65% short, 35% adequate. Livestock feed from pastures 90%. Hay, roughage for remainder of feeding season 30% very short, 40% short, 30% adequate.

International Weather and Crop Summary

August 6-12, 1989

HIGHLIGHTS

USSR ... In Western USSR, continued dry weather in the southern Ukraine stresses filling corn. Drier weather helps harvesting in central areas. In the New Lands, cool weather and scattered showers cover maturing spring grains.

EUROPE ... Remnants of Hurricane Dean bring much needed rain to sections of Great Britain and Ireland. Mostly dry weather favors winter wheat harvest in the northeast.

SOUTH ASIA ... Much needed rain benefits reproductive crops in central India. Dry weather persists for the second week in Gujarat.

EASTERN ASIA ... Heavy rain causes localized flooding across sections of the upper and central Yangtze Valley.

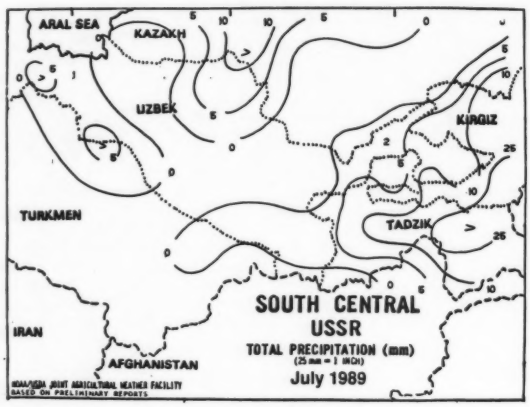
SOUTHEAST ASIA ... Rain finally returns to Thailand's western corn belt, favoring late planted corn.

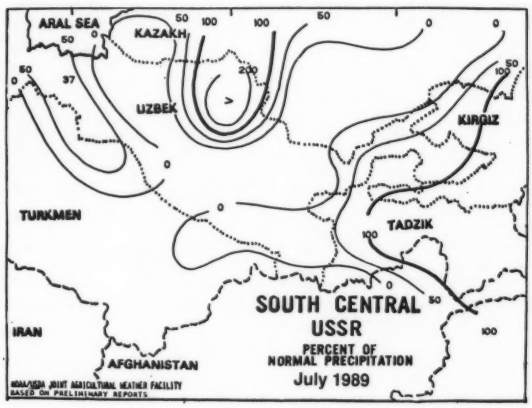
SOUTH AMERICA ... Light rain falls over most wheat areas. Topsoil moisture is generally adequate for wheat growth in Argentina and south-central Brazil.

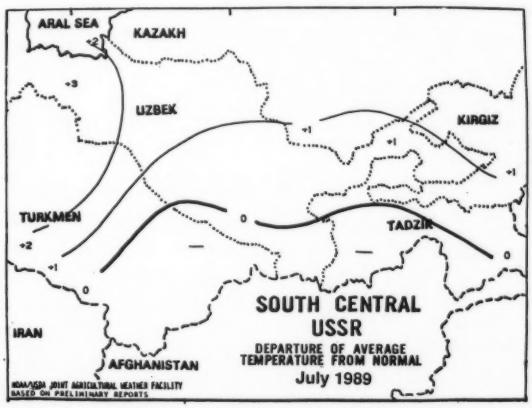
AUSTRALIA ... Seasonal rains continue in the south. Dryness favors sugarcane harvest in the northeast.

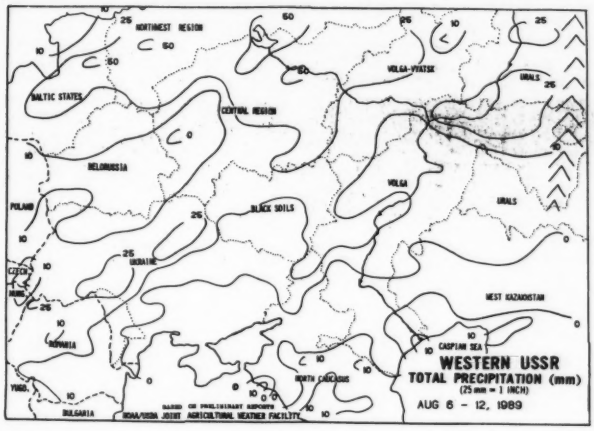
CANADA ... Dry, warm weather benefits maturing crops across the Prairies.

MEXICO ... Beneficial rain in the northwest helps crop growth and irrigation supplies. Seasonal showers fall over the Southern Plateau Corn Belt.

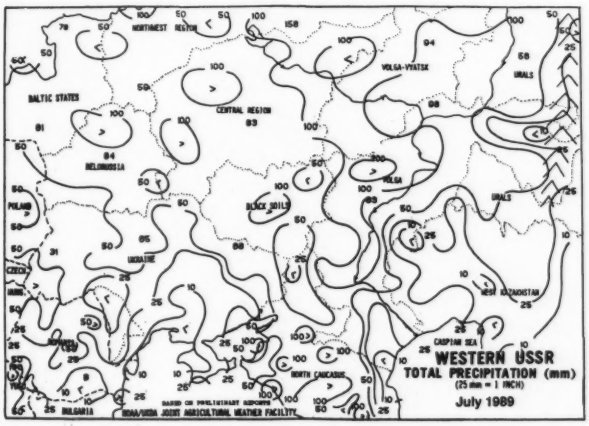


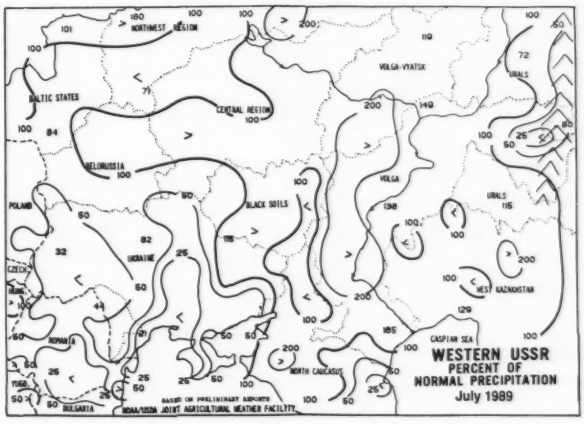


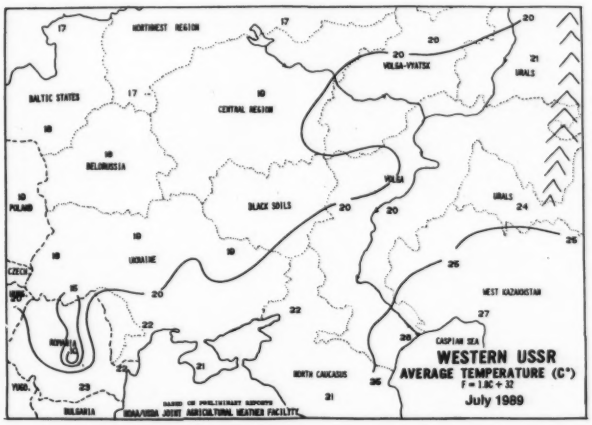


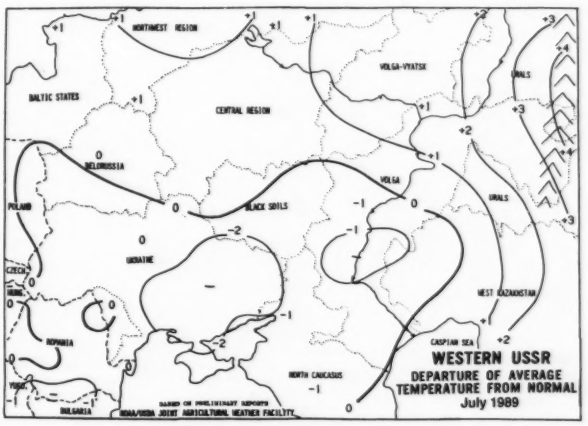


WESTERN USSR ... Wet weather (10-74mm) continued over the Baltic States and the Northwest Region, causing some delays in winter and spring grain harvesting. Drier weather over Belorussia, the southern half of the Central Region, and the Black Soils Region allowed harvest activities to resume with only minor delays. Rainfall amounts in these areas ranged from 1 to 16mm. Widespread showers (10-41mm) that fell in a narrow band which stretched northeastward from the southwestern Ukraine into the northern tip of the Ukraine slowed harvesting. Although unseasonable warm, dry weather over the southern Ukraine stressed filling corn, it helped spring grain harvesting. In July, above-normal precipitation over Belorussia, the Central Region, Black Soils Region, Volga, and the North Caucasus benefited spring barley and summer crops. Below-normal precipitation in the Ukraine helped winter grain harvesting. While July's dryness in the Ukraine limited moisture for corn in the reproductive to filling stages of development, below-normal temperatures reduced crop moisture demands.

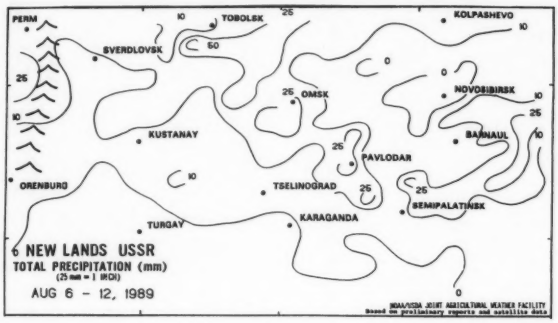


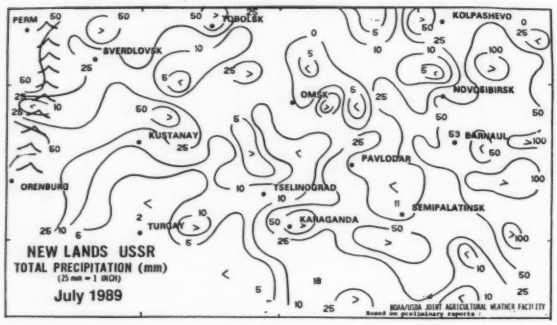


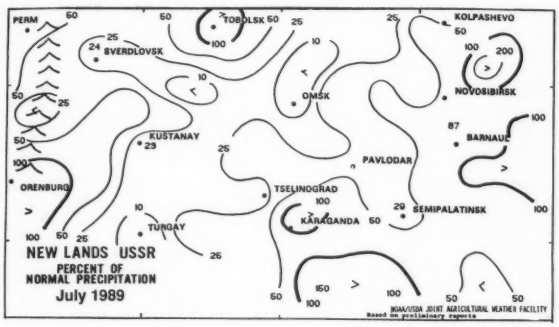


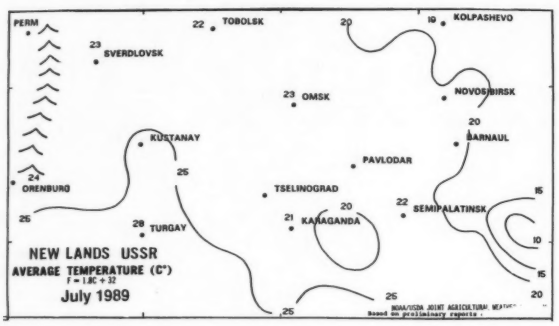


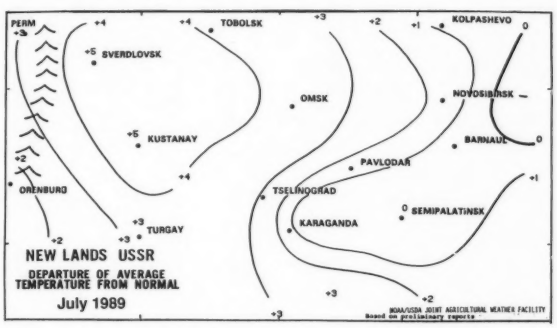
NEW LANDS ... Light to moderate showers (10-43mm) over the northern Urals, the western portion of West Siberia, and northern Kazakhstan came too late to help maturing spring grains. Mostly dry weather over the southern Urals and most of Kazakhstan favored spring grain maturation and helped early harvesting. Scattered showers covered filling spring grains in eastern areas. In July, hot, dry weather intensified in most areas. Well-below-normal precipitation covered more than half of the spring wheat producing areas and about one-third of spring barley producing areas. In addition, high temperatures ranging from 33 to 39 degrees Celsius (C) on several days in July were accompanied by low humidities (vapor pressure deficits above 30mb) and occasional windy weather. These unfavorable weather conditions produced moderate to severe stress on spring grains, which were advancing through the reproductive and early filling stages of development.

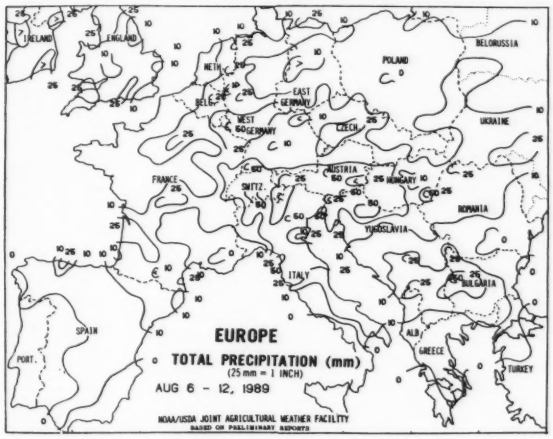




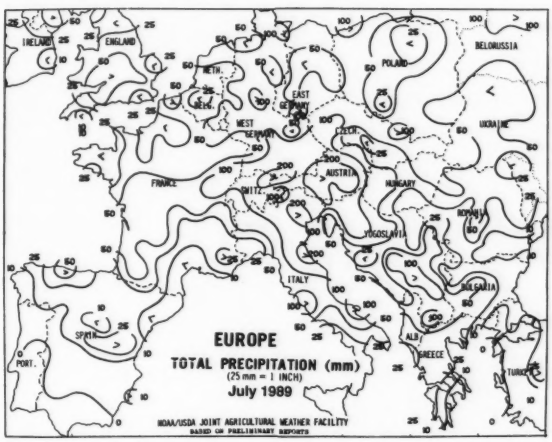


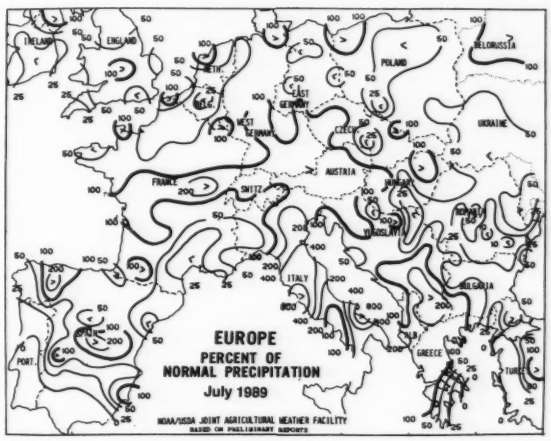


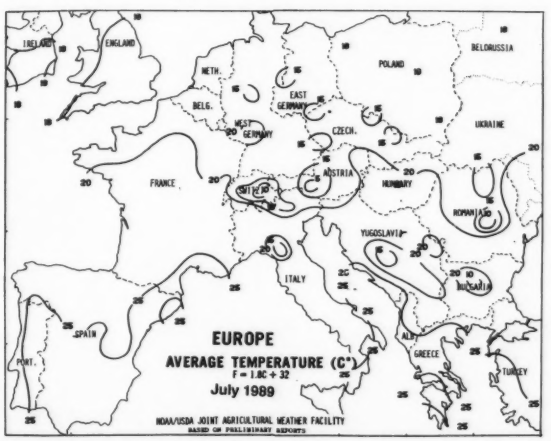


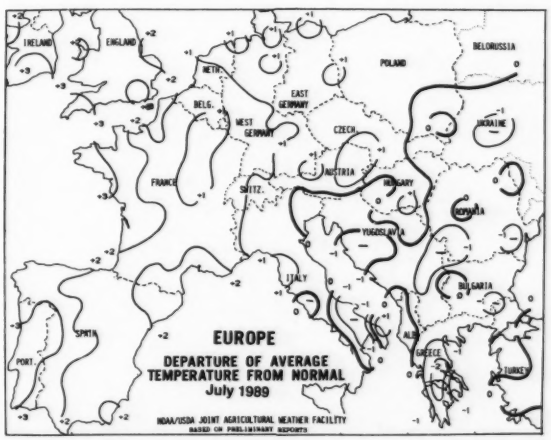


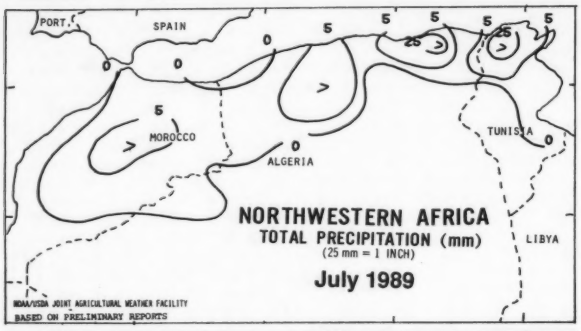
EUROPE ... A frontal system caused scattered moderate to heavy rain (15-40mm, with isolated amounts in excess of 40mm) in sections of West Germany, Benelux, eastern France, northern Italy, northern Yugoslavia, and Hungary, benefiting summer crops. Scattered severe thunderstorms brought heavy rain (25-50mm, with isolated amounts in excess of 50mm) and hail which caused localized crop damage in sections of southern France late in the week. Remnants of Hurricane Dean brought much needed rain (10-40mm) to much of Great Britain and Ireland although amounts were insufficient to totally alleviate the effects of more than 2 months of below-normal rainfall. Mostly dry weather in sections of central East Germany and Poland allowed rapid progress in winter wheat harvest. Below-normal rainfall and above-normal temperatures in July across much of northern Europe benefited winter grain harvest and quality but maintained moisture stress on spring planted crops, especially in the northwest. July precipitation in the south was generally below normal in the Iberian Peninsula and the southeast and above normal across most of Italy.

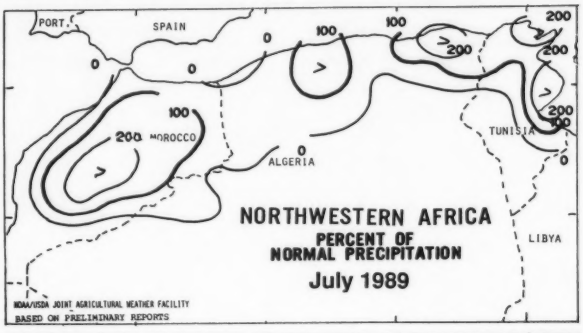


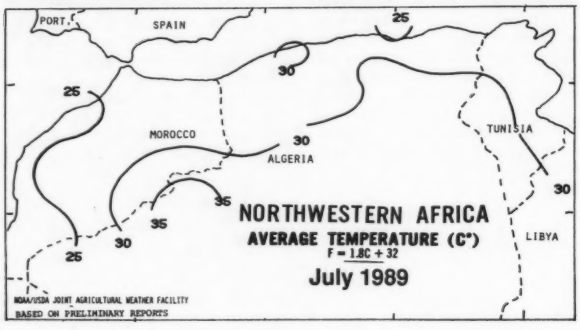


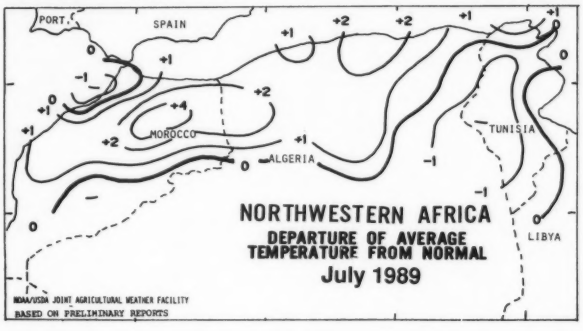


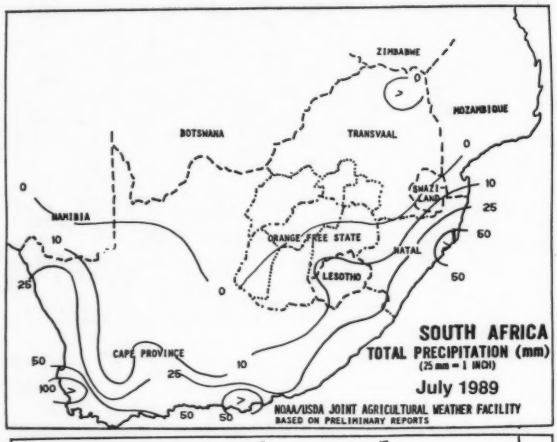


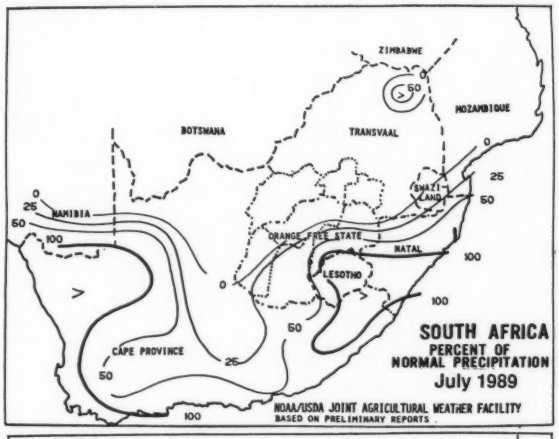

PORT.
SPAIN
MOROCCO
ALGERIA
TUNISIA
LIBYA
NORTHWESTERN AFRICA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
July 1989
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS

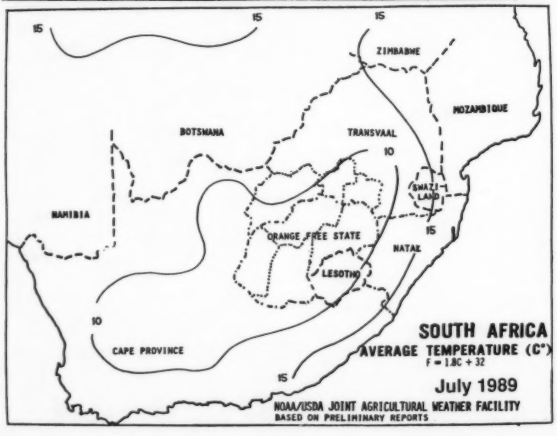

PORT.
SPAIN
MOROCCO
ALGERIA
TUNISIA
LIBYA
NORTHWESTERN AFRICA
PERCENT OF
NORMAL PRECIPITATION
July 1989
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS

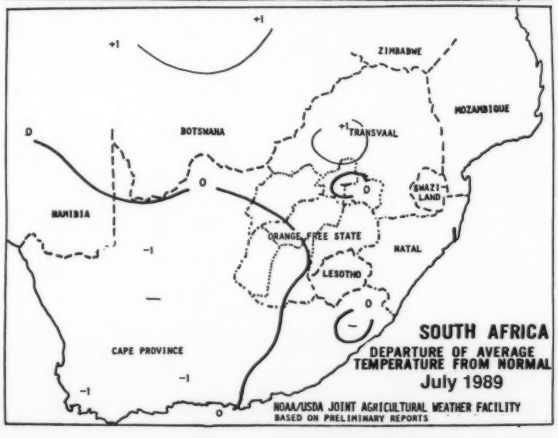

PORT.
SPAIN
MOROCCO
ALGERIA
TUNISIA
LIBYA
NORTHWESTERN AFRICA
AVERAGE TEMPERATURE (C°)
F = 1.8C + 32
July 1989
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS

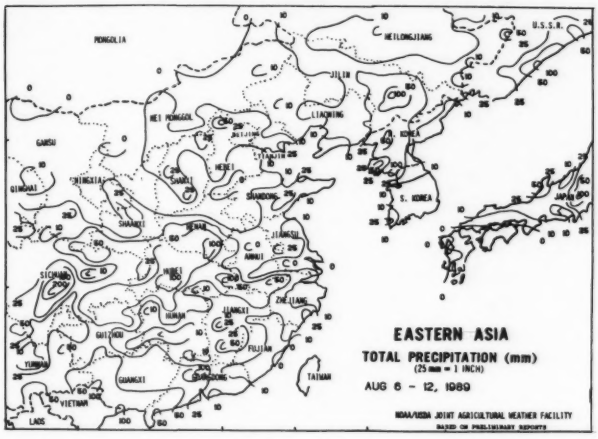

PORT.
SPAIN
MOROCCO
ALGERIA
TUNISIA
LIBYA
NORTHWESTERN AFRICA
DEPARTURE OF AVERAGE
TEMPERATURE FROM NORMAL
July 1989
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS


ZIMBABWE
MOZAMBIQUE
BOTSWANA
TRANSVAAL
NAMIBIA
SWAZI LAND
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
July 1989
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS

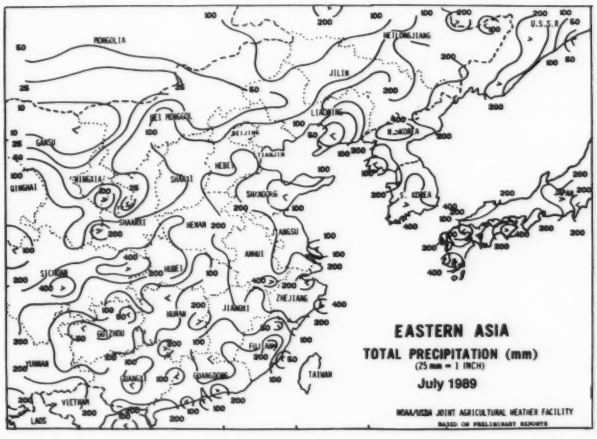

ZIMBABWE
MOZAMBIQUE
BOTSWANA
TRANSVAAL
NAMIBIA
SWAZI LAND
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
PERCENT OF
NORMAL PRECIPITATION
July 1989
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS

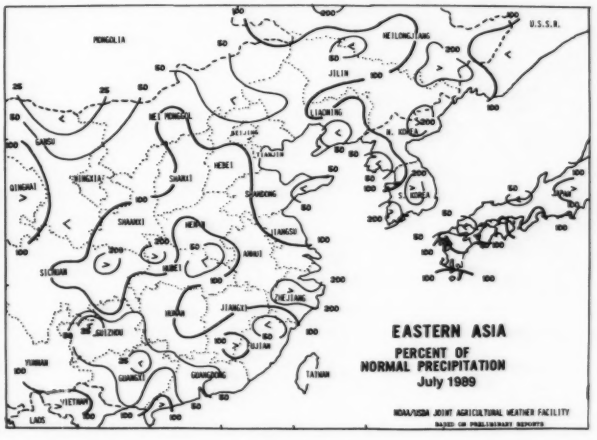

ZIMBABWE
MOZAMBIQUE
BOTSWANA
TRANSVAAL
NAMIBIA
SWAZI LAND
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
AVERAGE TEMPERATURE (C°)
F = 1.8C + 32
July 1989
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS

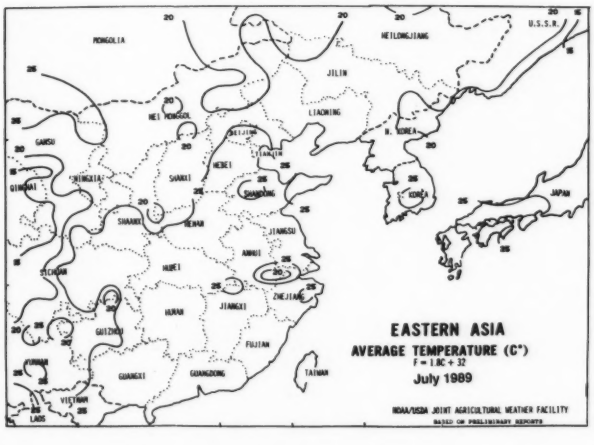

ZIMBABWE
MOZAMBIQUE
BOTSWANA
TRANSVAAL
NAMIBIA
SWAZI LAND
ORANGE FREE STATE
NATAL
LESOTHO
CAPE PROVINCE
SOUTH AFRICA
DEPARTURE OF AVERAGE
TEMPERATURE FROM NORMAL
July 1989
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS

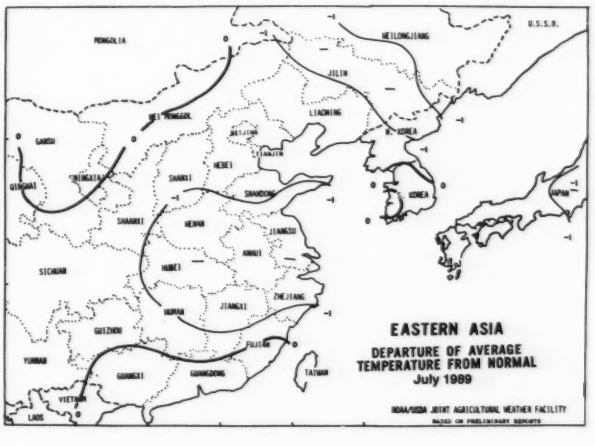

EASTERN ASIA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
AUG 6 - 12, 1989
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS

EASTERN ASIA ... Heavy rain (50-100mm, with scattered amounts up to 206mm) fell over sections of Sichuan, northern Guizhou and Hunan, Hubei, and southern Henan, causing localized flooding. Heavy rain (40-120mm) also caused flooding early in the week in sections of central Japan due to remnants of Typhoon Mac. In the north, scattered rains (10-40mm, with isolated amounts in excess of 50mm) favored filling summer crops across southern Manchuria and the North China Plain. In contrast, scattered showers (5-25mm) brought only limited relief to dry soils in sections of southeastern China, which received below-normal rainfall during much of July. Rainfall was also below normal across eastern sections of the North China Plain, western Manchuria, and Japan. Above-normal rain fell in sections of the central and lower Yangtze Valley and across much of the Korean Peninsula.

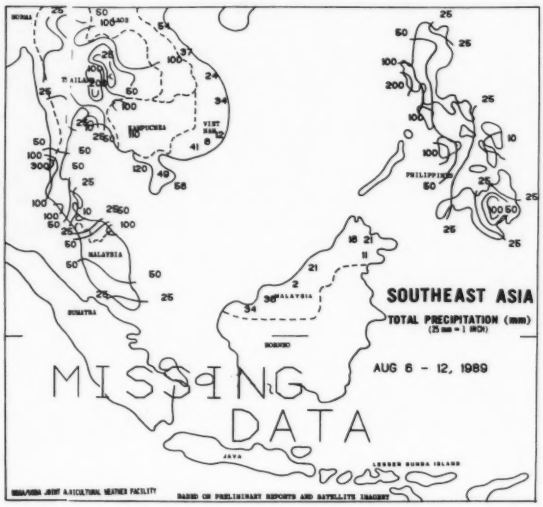


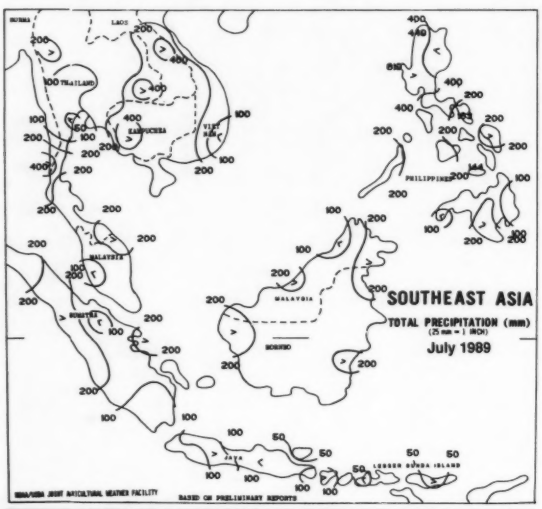


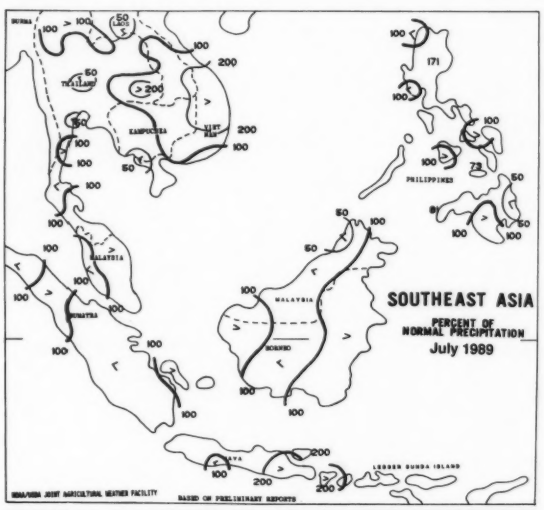


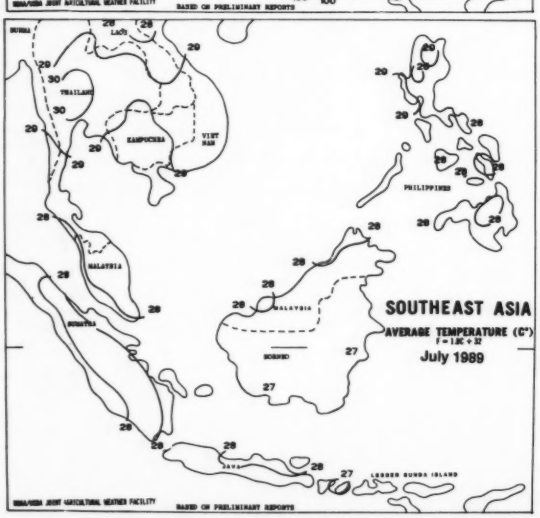


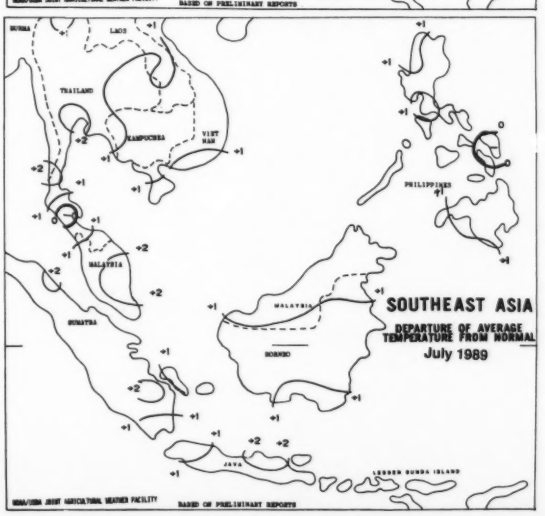
SOUTHEAST ASIA ... Seasonable rain (56-88mm) covered the western half of Thailand's corn belt, benefiting late planted corn in areas that had been drier than normal for most of the season. Pockets of light rain (25mm or less) continued in central and northern rice regions, but moderate to heavy rain (50-100mm or more) benefited immature grains elsewhere across Thailand, though some local flooding occurred. Moderate to heavy showers (50-100mm or more) covered most Philippine crop regions with excessive rain (200mm or more) persisting over southwestern Luzon, worsening flooding. In July, rainfall was below normal over Thailand from the region near Bangkok to the northeast, with most of the affected area running below 70 percent of normal. The dryness in the western half of the corn belt, accompanied by periodic hot weather, reduced the moisture available for normal crop reproduction. Rainfall was near to above normal over most Philippine crop areas during July, due mainly to tropical activity early in the month. Typhoon Gordon caused flooding and crop damage in Luzon during mid-July.

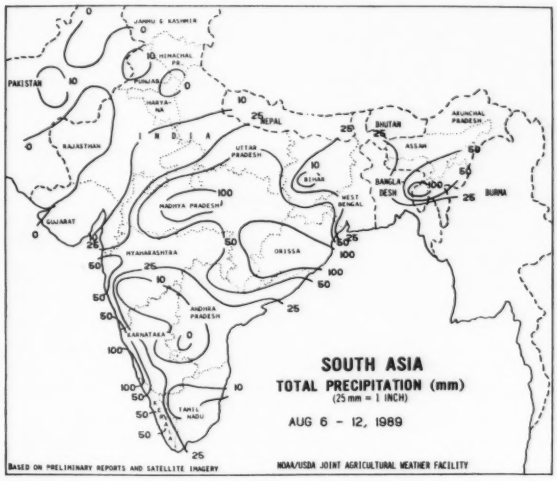

SOUTHEAST ASIA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
AUG 6 - 12, 1989
MISSING DATA
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY



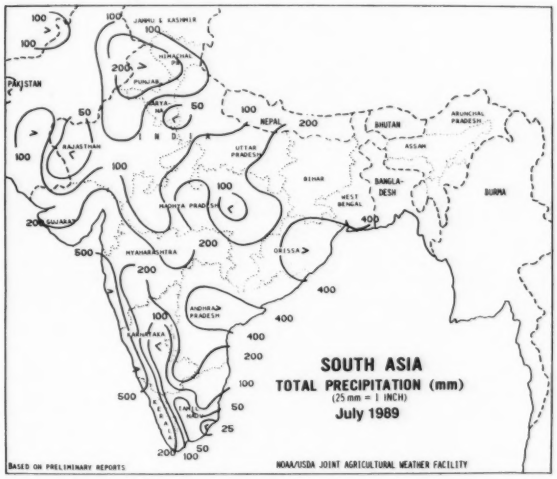


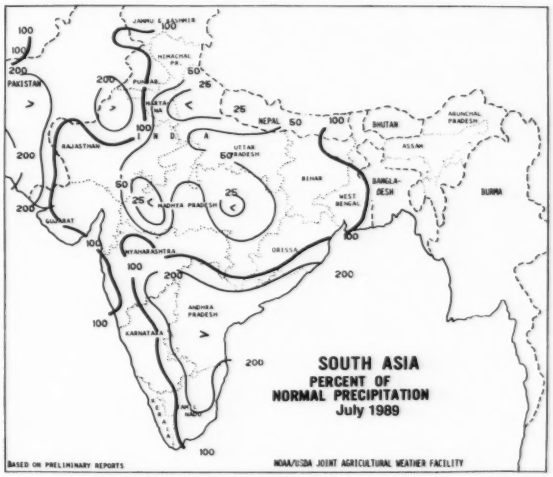


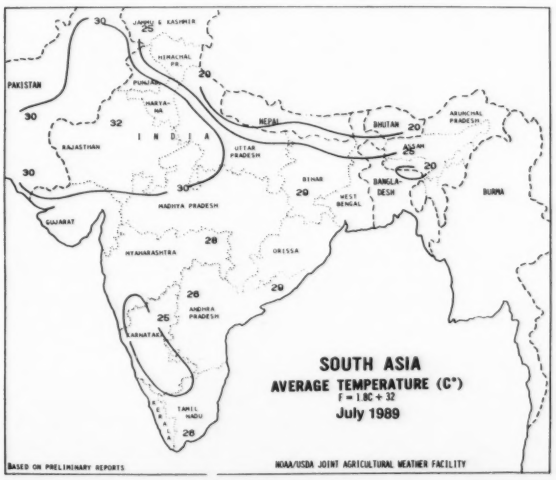


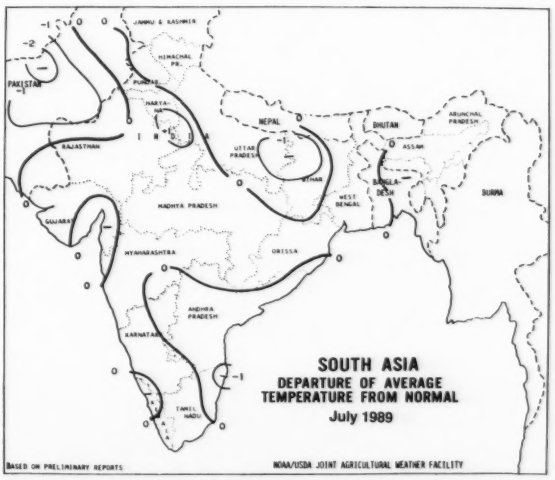

SOUTH ASIA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
AUG 6 - 12, 1989
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY

SOUTH ASIA ... Beneficial showers returned to central and parts of southern India, bringing some relief to summer crops advancing through reproduction. Heaviest rain (50-100mm or more) covered Madhya Pradesh, greatly improving conditions following recent weeks of below-normal rainfall. Rainfall averaged less than 10mm over a large area from southwestern Maharashtra to Tamil Nadu, but light to moderate rain (10-25mm or more) fell elsewhere in the south. Variable rainfall (10-50mm or more) covered the east with heaviest rain (81-157mm) causing local flooding in eastern Bangladesh. Minimal rain (less than 10mm) covered the northwest from Gujarat to western Uttar Pradesh, with locally hot weather stressing crops from Haryana and Rajasthan eastward to central Uttar Pradesh. Gujarat has been mostly dry for 2 weeks, reducing moisture reserves for crops in or nearing reproduction. In July, drier and slightly warmer-than-normal weather covered a large area from Haryana and western Uttar Pradesh to southern Madhya Pradesh, although planting rains covered Madhya Pradesh early in the month. Rainfall elsewhere was near to above normal, even though the monsoon was erratic and has yet to become firmly established in the north.

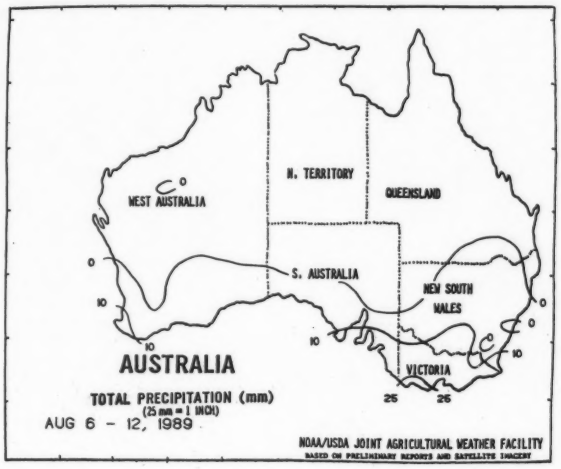


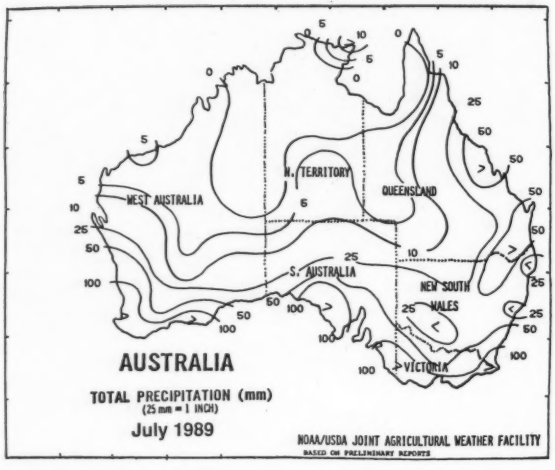


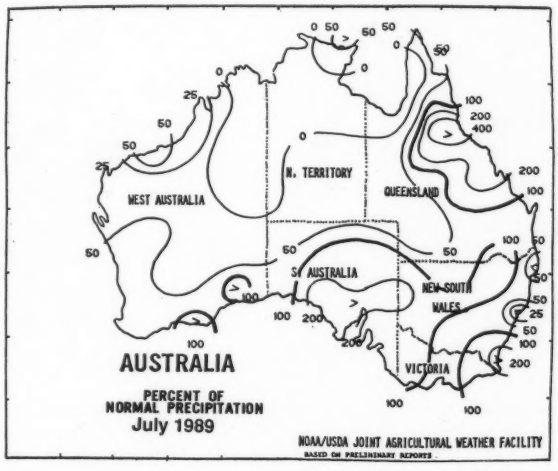


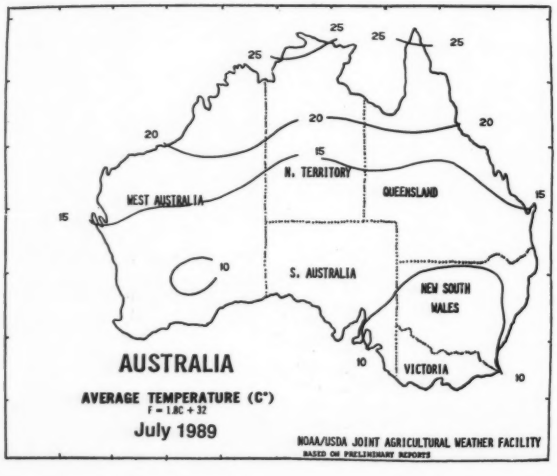


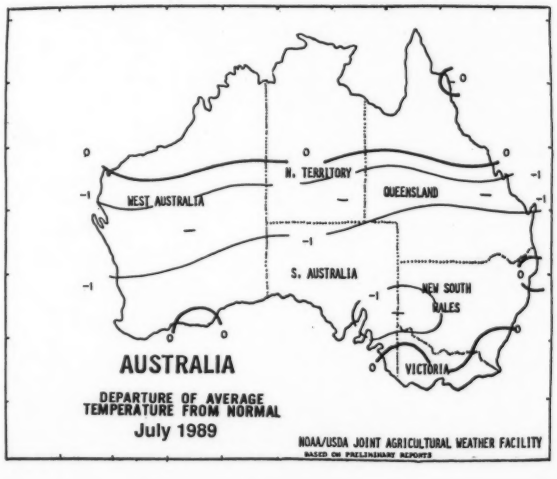
AUSTRALIA ... Light to moderate rain (5-20mm) continued over crop areas of South Australia, Victoria, and New South Wales, keeping soil moisture at high levels. Mostly light rain (less than 10mm) fell over growing areas of Western Australia and northern New South Wales, while southeastern Queensland remained seasonably dry. Dry weather also covered coastal sections of eastern Queensland, favoring sugarcane harvest. Below-normal weekly mean temperatures kept winter grains semidormant in most growing areas. Precipitation during July was above normal in western, eastern, and southern winter grains areas, continuing extensive delays in late planting. Above-normal rainfall also caused sugarcane harvest delays in sections of northeastern Queensland. Mean temperatures were normal to below normal across most crop areas.



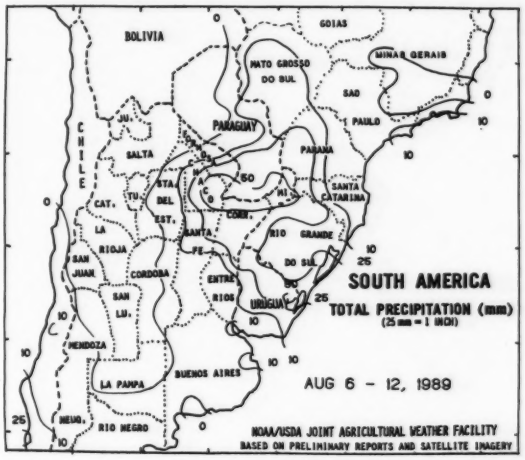


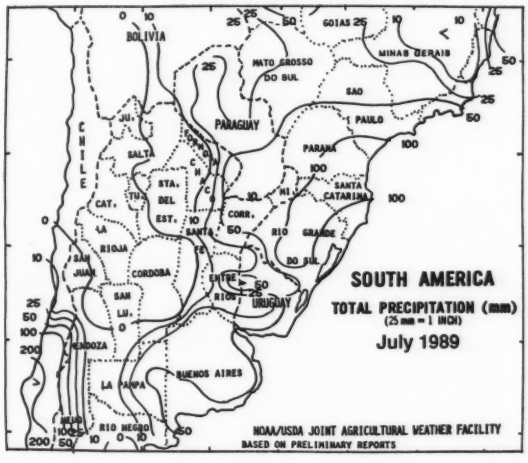


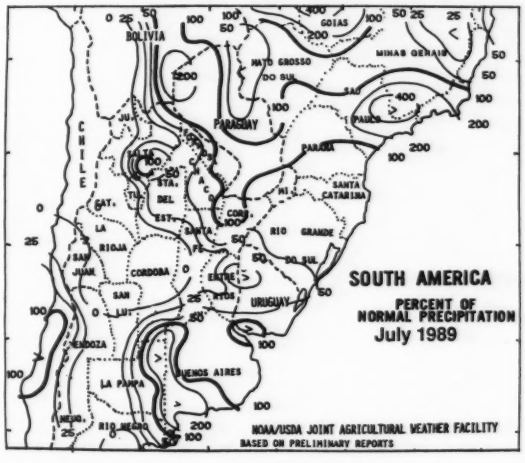


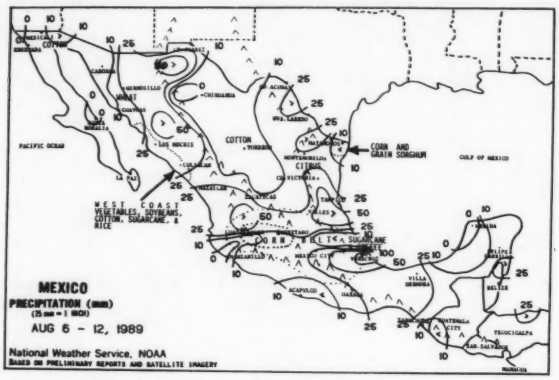


SOUTH AMERICA ... In Argentina, very light showers (less than 5mm) fell over most wheat areas, where planting has reached over 90 percent complete. Topsoil moisture is generally adequate for emerging grains. July rainfall averaged near to above normal in southern and western wheat areas, slightly below normal in eastern portions but below normal in northern fringes of the major wheat growing areas. Substantial showers (10-55mm) fell recently in northern cotton areas of Argentina, southern Paraguay, northern Uruguay and, in Brazil, over western portions of Mato Grosso do Sul, Parana, Santa Catarina, and Rio Grande do Sul. Light rain (1-10mm) fell over the remainder of Brazil's center-south region. The recent rain favored vegetative growth of wheat, following near- to below-average July rainfall. Dry weather prevailed in coffee areas of southern Minas Gerais.

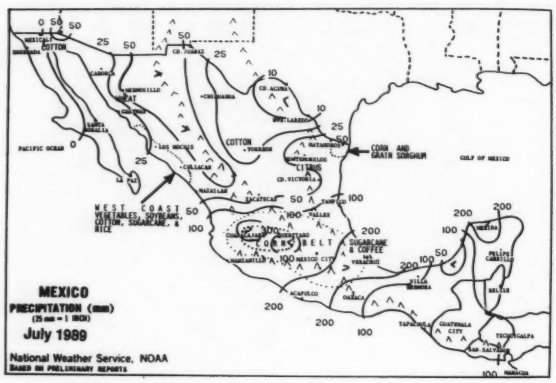

SOUTH AMERICA
TOTAL PRECIPITATION (mm)
(25 mm = 1 INCH)
AUG 6 - 12, 1989
NOAA/USDA JOINT AGRICULTURAL WEATHER FACILITY
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

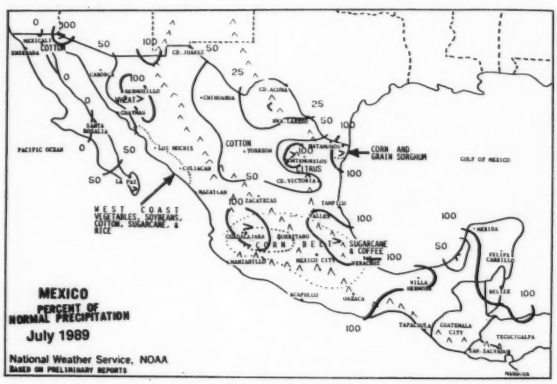


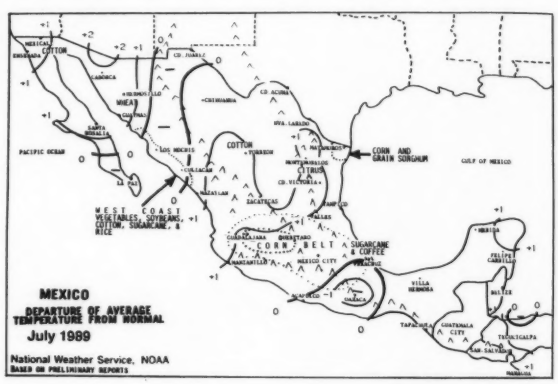


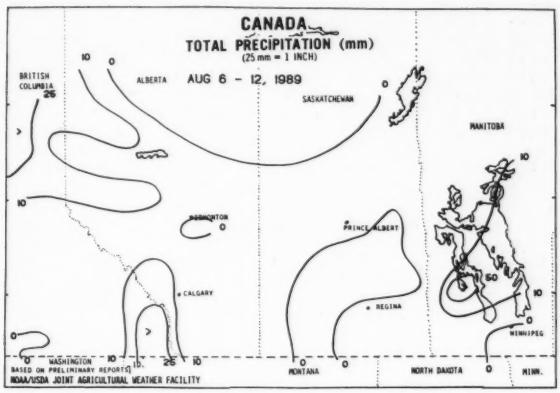

MEXICO
PRECIPITATION (mm)
(25 mm = 1 INCH)
AUG 6 - 12, 1989
National Weather Service, NOAA
BASED ON PRELIMINARY REPORTS AND SATELLITE IMAGERY

MEXICO ... Beneficial rain (25-60mm) continued over northwestern portions of the country, improving conditions for crop growth and helping irrigation supplies following a delayed start of the wet season. In the Southern Plateau, widespread showers produced 25-70mm or more across northern and southeastern portions and generally 10-25mm elsewhere, with only scattered drier pockets. July rainfall was erratic in the Plateau corn belt but generally averaged near normal in the west and southeast, while trending below normal in central portions. Much-below-normal July rainfall covered north-central cotton and grazing areas where dry weather persisted again this past week. Variable tropical showers covered the south during the week. July rainfall averaged near normal at Merida in the Yucatan.

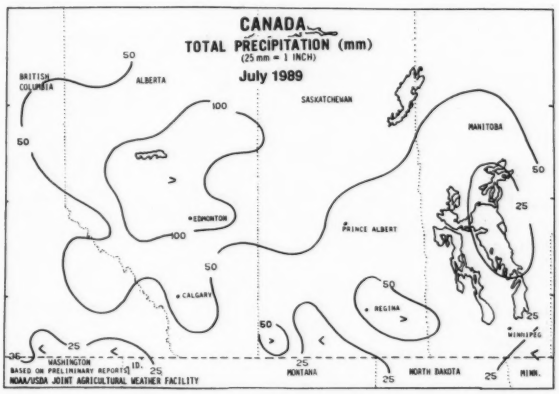


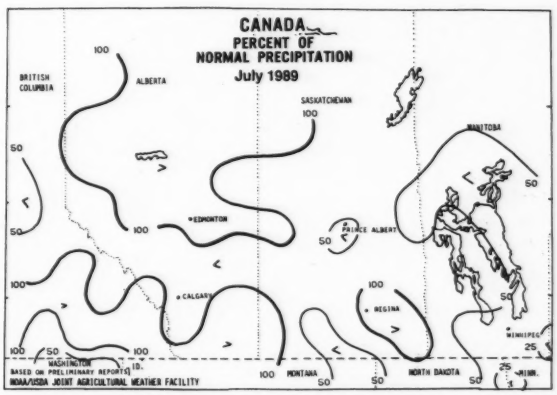


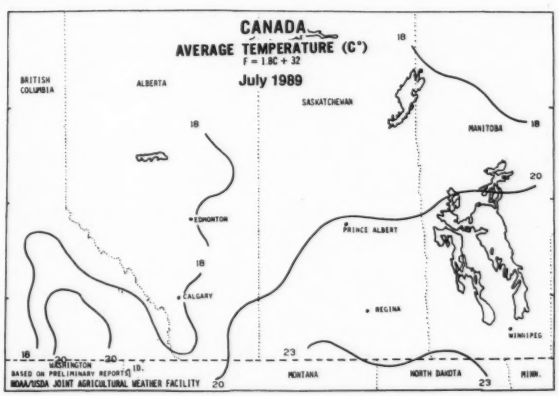


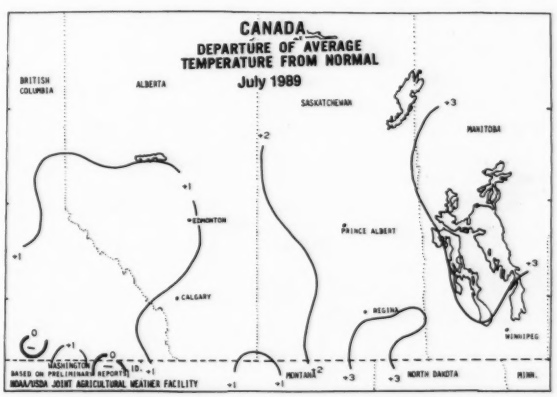


CANADA ... Mostly dry, warmer-than-normal weather dominated the Canadian Prairies, benefiting early maturing crops across the south. A local heavy shower (68mm) fell over Manitoba's northernmost crop area, but elsewhere, only scattered areas received more than 5mm of rainfall. Temperatures averaged 2-4 degrees C above normal across the region, benefiting maturing grains, and highs across the north ranged from 28 to 33 degrees C, favoring immature grains and oilseeds. Moisture conditions across the north continued generally favorable for immature crops. In July, rainfall was variable across the Prairies with below-normal accumulations in central Alberta, Manitoba, and much of central, southern, and northeastern Saskatchewan, reducing moisture reserves for crops advancing through reproduction. Temperatures averaged 1-3 degrees C above normal, increasing crop growth rates. An outbreak of hot, dry weather in mid-July stressed reproductive to filling grains from southern Alberta and central Saskatchewan to Manitoba. A second outbreak at the end of the month stressed some immature crops and helped hasten maturity across the south.









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Managing Editor . . . . . Douglas Le Comte
Meteorologists . . . . . Tom Heddinghaus
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